

**WORKSHOPS ON THE  
ENVIRONMENTAL IMPACT STATEMENT  
REVIEW PROCESS AND TECHNIQUES  
FOR INSULAR ENVIRONMENTAL MANAGEMENT**

**FINAL REPORT**

**Environmental Protection Agency  
Contract Number T009465-01-0**

**University of Hawaii  
Environmental Center**

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## INTRODUCTION

Recent economic expansion within Pacific island nations has engendered projects intended to create infrastructure for additional economic development, including dredging for harbor expansion, airport runway expansions, and road building. While these projects may have positive economic effects, they frequently have negative environmental consequences.

After World War II, the U.S. was given trusteeship over a number of island chains in the Pacific. Included with the unincorporated U.S. territories of Guam and American Samoa, the regions became known collectively as the American Pacific. Throughout most of the postwar years, these island areas were directly administered by the U.S. During the last two decades the islands have moved increasingly toward self-government; Guam and American Samoa have an elected governor and legislature, with local control over most internal affairs. The former Trust Territories of the Pacific have recently concluded negotiations with the U.S. and have become independent, either in a commonwealth arrangement (Commonwealth of the Northern Mariana Islands [CNMI]) or in free association with the U.S. (Republic of the Marshall Islands [RMI], Federated States of Micronesia [FSM], and the Republic of Belau).

On Guam and American Samoa, U.S. Federal laws, including environmental statutes such as the National Environmental Policy Act (NEPA) and the Coastal Zone Management Act (CZM) remain in effect. However, in newly independent Micronesian nations, U.S. Federal laws no longer apply and thus U.S. Federal agencies no longer have jurisdiction. Island governments have, or are in the process of promulgating environmental protection statutes. With some exceptions, however, the island nations lack definitive experience with environmental review at the local level. However, each island state recognizes the importance of environmental review and all seem anxious to increase their abilities in this area.

The recent expansion of economic development in the Pacific islands has led to serious concerns about degradation of island environmental resources. Three specific issues have been cited repeatedly by participants at the last three annual Pacific Territories Conferences held in Honolulu:

1. the need for adequate applicable environmental laws and regulations;
2. the need for training of agency, organization, and private personnel in environmental impact assessment review techniques, and
3. the need for a strong environmental assessment component in the planning process.



Recognition that help is needed in environmental review of specific development projects is an important first step toward resolving the more general problem of environmental degradation frequently accompanying economic development. The next step is to provide islanders with tools that will help them deal with the problem. The University of Hawaii Environmental Center proposed to conduct a series of workshops intended to teach island environmental managers how to conduct environmental reviews and to build networks among local experts so that their expertise can be tapped during the environmental review process. The workshops were designed to address the kinds of environmental problems found in the U.S. flag territories and the newly independent states of the former Trust Territories.

#### Purpose of the EIS Assessment Review Workshops

The EIS Assessment Review workshops were designed to be responsive to perceived needs of regional environmental managers as expressed by both on-island personnel and by officials of U.S. Federal Agencies (primarily the EPA) responsible for programmatic support to island affiliates. These needs are reflected in the project goal and objectives:

Goal: to implement an environmental review procedure that will help island planners to reconcile long-term economic development with environmental enhancement.

- Objectives:
- 1) to develop a manual of procedures for comprehensive environmental review;
  - 2) to conduct island specific workshops on the environmental assessment review process for selected environmental management personnel from each of the following areas: Guam, American Samoa, Republic of the Marshall Islands (RMI), Commonwealth of the Northern Marianas Islands (CNMI), Federated States of Micronesia (FSM), and Republic of Belau; and
  - 3) to identify, examine and discuss the technical and statutory attributes and deficiencies related to environmental review for each area.

#### PROCEDURES AND IMPLEMENTATION

The workshop program took place in two activity phases. The first phase included the compilation of all the resource materials and preparation of a workshop workbook for each island program. The second phase involved the actual conduct of the workshops with a focus on the purpose, principles, issues and methodologies of environmental assessment review.

## Phase I - Compilation and Preparation Materials

### A. Review of Environmental Laws, Regulations, Practices and Projects.

Copies of environmental legislation, including regulations dealing with environmental management were obtained from each of the six island jurisdictions. In particular, we requested materials relating to environmental impact assessment, coastal zone management, and earth moving or construction permitting. Laws and regulations were received from every jurisdiction.

The review of relevant laws and regulations was carried out by Michael Reveal, a graduate student from the University of Hawaii School of Law. A draft synopsis of each law was prepared and sent to a reviewer in each jurisdiction. Changes were made to the final synopsis on the basis of comments and clarifications received. A final version of the synopsis was included in the workbook for each jurisdiction. A copy of all the synopses is included as Appendix A.

To better understand the types of projects being carried out in the U. S. affiliated Pacific Islands and the specific concerns of the government regulators with regard to environmental issues, a member of the Environmental Center workshop team visited each of the designated workshop islands with the exception of American Samoa. This representative met with the heads of the various environmental agencies on each island, government agency personnel and leaders of the communities to discuss types of environmental problems caused by local development projects and to visit one or two prospective sites for field training during the workshop. In addition, photographs of a number of sites were taken for use in a slide show to illustrate the types of development projects in the Pacific and their impacts on the environment.

### B. Review of Literature

A literature review was conducted to identify reference articles for workshop participants to use in conjunction with lecture notes. Materials obtained during the literature review pertaining to various aspects of EIA comprised much of the basis for the workshop lectures.

### C. Preparation of Materials for the Workshop

The workshop relied heavily on visual aids to illustrate lecture topics. A slide show using photographs taken on the initial reconnaissance trip, was developed by Mr. Raymond Tabata, UH Sea Grant Extension Agent. This slide show touched upon a wide variety of topics, including groundwater contamination, dredging effects, shoreline protection, deforestation, landfilling, lagoon circulation, archaeology, and social and economic impact assessments (Appendix B). In addition to the slide show, overheads and slides were prepared with the assistance of the Publications Unit of the UH Sea Grant College Program to accompany specific sections of the workshop presentation.

A draft outline of the information to be presented was prepared for each section of the workshop and sent for review to island representatives in March 1989. In addition outlines were reviewed by Dr. James Maragos, U.S. Army Corps of Engineers, Ms. Vicki Tsuhako, U.S. EPA, and Dr. Luciano Minerbi, UH Urban and Regional Planning Department. Where appropriate, revisions were made based on comments received, and a second draft was prepared in May 1989. To assess the efficacy of the workshop elements, a practice "trial run", workshop session, using the new outline, was held on May 12, 1989 at the Environmental Center for local environmental managers and other professionals. This review was attended by Ms. Sheila Wiegman, American Samoa Environmental Protection Agency, Mr. Ron Cannerella, Republic of the Marshall Island Environmental Protection Authority, Dr. James Maragos, Ms. Vicki Tsuhako, and Mr. Raymond Tabata. Revisions to the outline made after this review were incorporated into the final workbooks.

## Phase II - Workshop Presentation

Workshops were scheduled in each of the following areas: American Samoa, Guam, Majuro, Saipan, Truk, Pohnpei, and Belau. To accommodate scheduling and logistic problems, three separate excursions were necessary. Pago Pago served as the inaugural workshop because airline schedules do not permit the combination of a trip to American Samoa with other workshop destinations. The second trip was scheduled approximately 7 weeks after the first to allow time for any revisions deemed necessary after the Samoa field trial. Workshops were conducted in August 1989 in Majuro, Truk, and Pohnpei; and in Belau, Saipan, and Guam in September 1989. A list of workshop participants who completed the course is included in the Appendix C. The following sections present a synopsis of each of the seven workshops.

### American Samoa (June 12-14, 1989)

The workshop in American Samoa was held on June 12-14, 1989 at the Rainmaker Hotel in Pago Pago. Attendance at the workshop varied from 20 to 35 participants, with an average of about 25 per day. The site chosen for the field trip was the Pacific Resources Inc. (PRI) oil storage facility in Pago Pago. The section of the workshop dealing with local environmental laws was presented by Mr. Richard Volk, planner, Mr. Lelei Peau, manager of the American Samoa Coastal Zone Management Program, and Ms. Sheila Wiegman of the American Samoa Environmental Protection Agency. Mr. Pati Faaei and Ms. Wiegman were our island contacts and made all the necessary arrangements.

As expected, there were a few minor problems encountered in this first full-scale presentation of the workshop, many relating to logistics (for example, problems in darkening the room for slide presentations). In particular, the slide show needed revision to better illustrate points of specific interest to the individual island communities. Also, the discussion of the relationship between Hawaii's Environmental Statutes, Environmental Center's institutional structure, and networking during

environmental review required clarification as to its possible application to other island environmental management systems. Redundancies between lectures were identified, and a number of typographical errors in the workbooks were brought to our attention. However, the overall response to the workshop was extremely favorable, and evaluations (Appendix D-1) were very positive. Discussions at the end of each lecture section were lively, particularly following the section on local environmental laws. At the close of the workshop, many participants expressed support for requiring EIA's as part of the American Samoa Project Review and Notification System (PRNS).

Following the session in American Samoa, lectures, visual materials, and workbook contents were revised to reflect the observed needs, and the next series of workshops was scheduled for a three week period in August.

#### Majuro, Republic of the Marshall Islands (August 8-10, 1989)

The workshop was presented August 8-10, 1989 at the Natural Resources Ministry's conference room. There were six participants including one participant from Ebeye island in Kwajalein Atoll. The others were from Majuro. The site review project chosen was the renovation of the old pier in Uliga near the Alele Museum. The local laws section was presented by the Marshall Island Environmental Protection Authority's chief counsel, Ms. Elizabeth Harding. Mr. Ron Cannerella, and Mr. Kasuo Helgenberger, of the Environmental Protection Authority, were our island contacts. The workshops proceeded in a timely manner primarily due to Mr. Helgenberger's efforts which also included making arrangements for the conference room and finding the necessary visual equipment.

The small turnout was disappointing particularly since considerably more people had indicated their interest in participating in the workshops during the reconnaissance visit to Majuro and there were (are) many construction projects underway that would likely benefit by environmental assessment review practices. Apparently there had been little publication of our workshops. Furthermore, our workshops conflicted with the opening day of the Marshall Islands Legislature, previously unmentioned in developing the scheduling plans. Despite these shortcomings, however, the group was very attentive and asked many questions. Each of the lecture sections went very well and no major problems were evident. The composite evaluation (Appendix D-2) reflected a general agreement among the participants that the workshop was productive. As in American Samoa the section on local laws provoked lively discussion. Several participants expressed the opinion that the laws are confusing and that subsequent workshops should devote more time to the application and implementation of environmental laws and regulations.

Truk, Federated States of Micronesia (August 15-17, 1989)

The workshop was presented on August 15-17, 1989 at the Continental Hotel on Moen island. Our island contacts were Mr. Sanphy William, Mr. Joe Konno and Ms. Julita Albert, Truk Environmental Health Division. The project selected by the local island contacts was the repair of the circumferential road on Fefan island located just south of Moen about 20 minutes by small boat. Ms. Albert also arranged for transportation to and from Fefan for the field trip. The local laws section was presented by the Environmental Health Coordinator of the FSM National Government, Ms. Donna Scheuring, and the Director of Health for Truk state, Mr. Nacha Siren.

The workshop was attended by an average of 17 people each day. Participants took an active part in the presentations and discussions and kept the presenters busy fielding many excellent questions both during and at the conclusion of each lecture. Ms. Scheuring lead a lively discussion on the use of EIA in the FSM. Her comments led to a call by the participants for better coordination between the state and federal levels in FSM.

The results of the evaluations (Appendix D-3) were gratifying in that the overwhelming majority of participants felt the workshop was well done and helpful. Some participants expressed the opinion that the slide show should have included more local examples but most of the comments were quite positive. As in American Samoa, participants at the close of the workshop were enthusiastic about instituting an EIA process for their island.

Pohnpei, Federated States of Micronesia (August 21-23, 1989)

The workshop was held August 21-23, 1989 at the National Legislature Chambers in Kolonia, Pohnpei. The project selected for the field trip site review was the proposed Fish Processing Plant on Dekehtik Island on the site of the present Pohnpei Marine Resources offices. The local laws section was presented by the Director of Environmental Health for the Pohnpei State government, Mr. Eldon Hellan. Ms. Donna Scheuring served as our primary contact person with assistance from her secretary, Ms. Clara Halvorsen.

There was an average of 17 participants in attendance throughout the workshop. Three of the participants were from Kosrae, one of the four states of the FSM. After some opening day equipment problems the workshops proceeded smoothly. The participants, especially those from Kosrae, were extremely interested in the concepts being presented and the mechanisms for EIA. They questioned Mr. Hellan extensively on why EIA's are not required for all projects on Pohnpei.



The results of the evaluations (Appendix D-4) showed that the overwhelming majority of the participants thought the workshop was educational and productive. As in the other workshops the section on local laws provided some of the liveliest discussions. Representatives of Kosrae and Pohnpei debated vigorously on whether national laws supercede state laws. Kosrae it seems has a different set of laws regulating the issuance of a construction permit than those proscribed by National legislation. Although the differences were not resolved during the discussions, participants from both states called attention to the need for better communication with the national government.

#### Republic of Belau (September 4-6, 1989)

A second series of workshops was conducted on Belau, Saipan, and Guam, beginning in Koror, Belau, on September 4-6, 1989. The workshop was held in the Koror Library. A proposed 1000 room hotel on the Ngesaol peninsula on Koror island was selected as the project for the field trip site review visit. The Environmental Laws section was presented by Ms. Nancy Convard, Executive Officer, Environmental Quality Protection Board. Ms. Convard also served as our island contact for Belau.

The average attendance at the workshop was 25 participants even though the first day was a holiday in Belau. The workshop started on time and was kept on schedule throughout by the prompt attendance of the majority of participants.

The results of the evaluations (Appendix D-5) show that the overwhelming majority of the participants felt the workshop was "well done". Most of the comments were very favorable and supportive. Participants voiced concern over the pace of development in Belau and favored the insitution of vigorous environmental review requirements.

#### Saipan, Commonwealth of the Northern Mariana Islands (September 12-14, 1989)

The Saipan workshop was held on September 12-14, 1989 at the Aqua Resort Hotel in San Roques, Saipan. Mr. Russell Mechem, Division Chief, and Ms. Tina Graves, Planner, of the Division of Environmental Quality (DEQ), were our island contacts. The field project selected by the Saipan DEQ was the proposed Nansay Hotel which is next to the Aqua Resort. The local laws section was presented by Ms. Graves and Ms. Susan Snow of the Coastal Resources Management Office.

The site of the workshop was quite a distance from the population centers on Saipan consequently many of the participants arrived late on the first day. Otherwise, there were no other major problems. The 20 or more participants were very knowledgeable about EIA review and the concepts underlying the review process. Hence proportionally more time was available to discuss issues like the true cost of development and the problems encountered in trying to carry out "good" plans on such a fast growing island.

A number of participants in the Saipan workshops were from the private sector. This added another dimension to the workshop since these participants could articulate the viewpoint of developers and the frustrations of dealing with a bureaucracy. Participants from the legislature provided yet another dimension. These participants asked for suggestions in designing new legislation for environmental review. From the overwhelmingly positive comments on the evaluations the workshop was an unqualified success (Appendix D-6).

#### Territory of Guam (September 19-21, 1989)

The final stop on this second series of workshops was the U.S. Territory of Guam. The workshop was held at the Executive Offices of the Territorial Government in Agana, Guam. The project chosen for the field study site was a proposed hotel development in the Agana Marina. The local laws section was presented by Mr. Gary Stillberger, Guam Environmental Protection Agency. Mr. Stillberger was also our island contact person.

The workshop was consistently attended by 26 participants including a representative of the developer of the designated field study site. A mistake in room reservations lead to a late start on the first day but it proved to be the only organizational problem experienced throughout the three days.

The attendees were very familiar with the concept of EIA. Since NEPA covers all federally funded projects, most participants expressed interest in instituting some type of mandatory EIA process for Territorial projects. As in Saipan, the capacity of the infrastructure and regulatory process is strained by the number of projects being proposed. Our section on networking found the most receptive audience in Guam since the University of Guam could be tapped for expertise much like the University of Hawaii. The evaluations (Appendix D-7) were overwhelmingly favorable. Most participants indicated that the material was "well presented and useful".

#### SUMMARY AND CONCLUSIONS

During FY 1988-89, the Environmental Center received funding from the U.S. Environmental Protection Agency's Office of Pacific Island and Native American Programs, U.S. Department of the Interior, and from various Pacific Island EPA-affiliated offices to conduct a series of workshops throughout Micronesia. These workshops focused on the process of environmental impact assessment (EIA) review, with an ultimate goal of establishing systems for environmental networking within and among island groups. In all, seven workshops were presented. Immediate responses of participants and observers at all of the workshops clearly validated the short-term positive benefits which the program provided. The enhancement in understanding of principles and practicalities of EIS review was undeniably a constructive process in terms of regional environmental management. Discussions during and after

the sessions, as well as comments on evaluations, repeatedly emphasized the applicability of the workshops to immediate needs. As presenters, we were gratified by the warmth of the response to our efforts and the enthusiasm of the participants.

The central, unifying theme of our workshops was that better environmental information leads to better decisionmaking which, in turn, leads to a better project and greater benefits to the general public. More specifically our aims were:

1. To improve land use management in the Pacific Islands;
2. To improve the capabilities of island environmental and resource managers to review environmental impact assessments; and
3. To encourage managers to network with knowledgeable resource people locally and regionally.

These aims arose from our recognition of the central role played by environmental impact assessments in achieving balanced, sustainable development in island ecosystems. To achieve these aims our workshops analyzed the process of EIA in the context of development scenarios commonly encountered in island ecosystems and focused on the benefits of enhanced information exchange. An unstated, but equally valid aim of the workshops was to solidify the foundation of the environmental management system present in each of the islands in which we made our presentation.

There remains considerable uncertainty about the long term effects of our workshops. The concern expressed by island environmental managers is that the benefits of a workshop, such as that recently completed, will be lost unless a comprehensive, programmatic, long-term approach to reinforcement initiatives is developed. In our opinion, there is a clear need for a long term approach to environmental management training throughout the U.S. affiliated Pacific islands. Based on ongoing analyses of environmental management theory, specific training programs would be immensely beneficial, not only for environmental management staff, but for all levels of government officials in island areas. However, to be effective, such training must be implemented on a scheduled, recurrent basis, such that each segment builds upon the preceding one. Successive workshops are required that both reinforce and broaden management competence. Long term improvements in environmental management are more likely to emerge from a "process" rather than from "events". Therefore, it is our recommendation that consideration be given to the establishment of a systematic "process" for environmental management training in the U.S. affiliated Pacific islands.



## AMERICAN SAMOA

Environmental Law and Regulation Reviews  
by Michael Reveal

Executive Order 3-80 established the American Samoa Coastal Management Program to facilitate participation in the U.S. Coastal Management Program. The programs are designed to achieve land use consistent with efforts to promote and preserve the ecological resources of the coastal zone. The area governed by the program includes all of the territory's land mass as well as all of the coastal waters and submerged lands extending seaward three nautical miles.

All American Samoa government agencies and programs are responsible to operate following the guidelines expressed in the Coastal Management Program. Overall program development, administration, and coordination, however, rests upon the Office of Development Planning (ODP).

Legislation will be introduced to establish the program under Territorial statute in order to receive continual encouragement and assistance from the U.S. Coastal Zone Management Program.

The new legislation mandates that the Director of the Office of Development Planning shall promulgate regulations to govern a "single, clear and streamlined permit system, integrating the activities and regulatory authorities of each of the territorial agencies which may affect the natural resources of the coastal zone...." The permit process shall provide, moreover, for the "technical analysis of the environmental, economic, energy, social, and cultural impacts or consequences of any proposed project."

The Director shall, further, promulgate regulations establishing "procedures and criteria for the determination of whether any proposed project has the potential to have a major impact on the natural resources of the coastal zone, or, whether such a proposed project has the potential to have a minor impact on the natural resources of the coastal zone."

The above requirements for regulations appear to call for environmental impact assessments. No criteria are established governing what should be included to facilitate evaluation of proposed environmental impacts.

Under current law, the Project Notification and Review System is in effect. According to the ODP, if an applicant is applying for a land use permit from the Coastal Management Plan (CMP), the applicant must include with the petition a "plan for the proposed activity...; a detailed description of the site, the surrounding area, the proposed activity, all proposed actions to mitigate or restore adverse effects, and a statement that indicates why the proposed activity is necessary at the site in the manner proposed." It might well be recommended that each applicant provide this information to facilitate more effective analysis of any project.

For projects considered to be "minor," the ODP may consult with other government agencies to evaluate whether or not the proposed activity is consistent with CMP policies and objectives.

For projects that are deemed "major," the ODP distributes "technical findings forms" to appropriate review agencies of the government. These agencies draft the technical findings on the project and its potential impacts. Based on these recommendations, the agencies determine whether the project is consistent with CMP policies and objectives or not.

Through a process of consultation coordinated by the ODP, an agreement is reached among the various agencies involved whether or not to approve the project. The applicant may appeal the decision following the provisions of the Administrative Procedures Act.

### Comments

The burden of developing impact statements on "major" projects, under current law, is upon the various government agencies. ["Minor" projects do not require any impact assessment.] The ODP, in coordination with appropriate American Samoa government agencies determine if a project permit shall be granted. The ultimate determination of whether a project is "consistent" with the coastal management program is, therefore, placed in

the same agency that drafted the initial impact assessment. The agency hence reviews its own work.

Permit applications for land use permits from the CMP, however, require exhaustive documentation that is the responsibility of the petitioner to develop. The agencies, along with the ODP, determine, according to established criteria specified in the User's Guide, whether or not to grant a project permit. This process provides for more independent review following specific criteria.

Impact assessments that address the environmental, economic, energy, social and cultural aspects of a proposed project do not need to be tedious, exhaustive studies. Such a document, even for minor projects, would assure that all potential impacts were systematically and carefully considered. Published guidelines specifying the areas to be addressed in an impact assessment should be available to assist project developers in the preparation of impact statements. If the project is considered to be a "major" project, further criteria can be addressed.

The end result is a document prepared independently of the reviewing agency, subject to the reviewing agency's recommendation for amendment, that is tailored to the requirements of the project and that adequately addresses the issues of concern of the Coastal Management Program.

## AMERICAN SAMOA ENVIRONMENTAL PROTECTION PROGRAM

### Introduction

The Environmental Quality Act [24 ASCA 24.0101 et seq.] created the Environmental Quality Commission (EQC). All environmental programs are clustered under the authority and supervision of the Executive Secretary of the EQC. In 1987, Executive Order No. 16-1987, established the American Samoa Environmental Protection Agency (ASEPA) within the Office of the Governor. The five branches of ASEPA under the leadership of the Executive Secretary of the EQC are: Safe Drinking Water; Pesticide, Solid and

Hazardous Waste; Air Pollution and Public Information; Enforcement; and Laboratory Services. The ASEPA moreover is responsible for the enforcement of the following U.S. federal environmental statutes: Clean Water Act; Safe Drinking Water Act; Federal Insecticide, Fungicide, and Rodenticide Act; Clean Air Act; Resource Conservation and Recovery Act--Underground Storage Tank, Solid and Hazardous Waste Management.

### Environmental Quality Act

[P.L. 12-45; 24 ASCA 24.0101 et.seq.]

The policy of the American Samoa government as stated in the Act is "to achieve and maintain such levels of air and water quality as will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this territory and facilitate the enjoyment of the natural attractions of the Territory.

Permitting [24 ASCA 24.0116 et.seq.]

This creates a permitting process for all sources of air or water pollution or equipment causing or intended to prevent pollution. The EQC administers the permitting program. The Act states that the EQC may require applications to be accompanied by plans, specifications, and other information deemed necessary. No environmental impact assessment statements are required by the Act.

Injunctive Relief [24 ASCA 24.0152]

The EQC may seek injunctive relief from the High Court to suspend the operation of anyone in violation of the Act until such time as the polluting operation is in compliance with the Act. Orders of the EQC are subject to High Court review to determine if the EQC acted arbitrarily or capriciously. [24 ASCA 24.0160]

## REGULATIONS PROMULGATED BY EQC TO IMPLEMENT ENVIRONMENTAL QUALITY ACT

24.0101 et.seq. Environmental Quality CommissionPermitting Process

The applicant who intends to construct or modify any potential source of pollution or install or use any equipment or device either causing or contributing to air or water pollution or designed to prevent such pollution must request a permit for such activity from the Executive Secretary of the EQC on forms provided, accompanied with supporting documents as requested by the EQC. No specific requirement for an environmental impact assessment statement appears in the regulation. The EQC has 90 days within which to grant or deny the application.

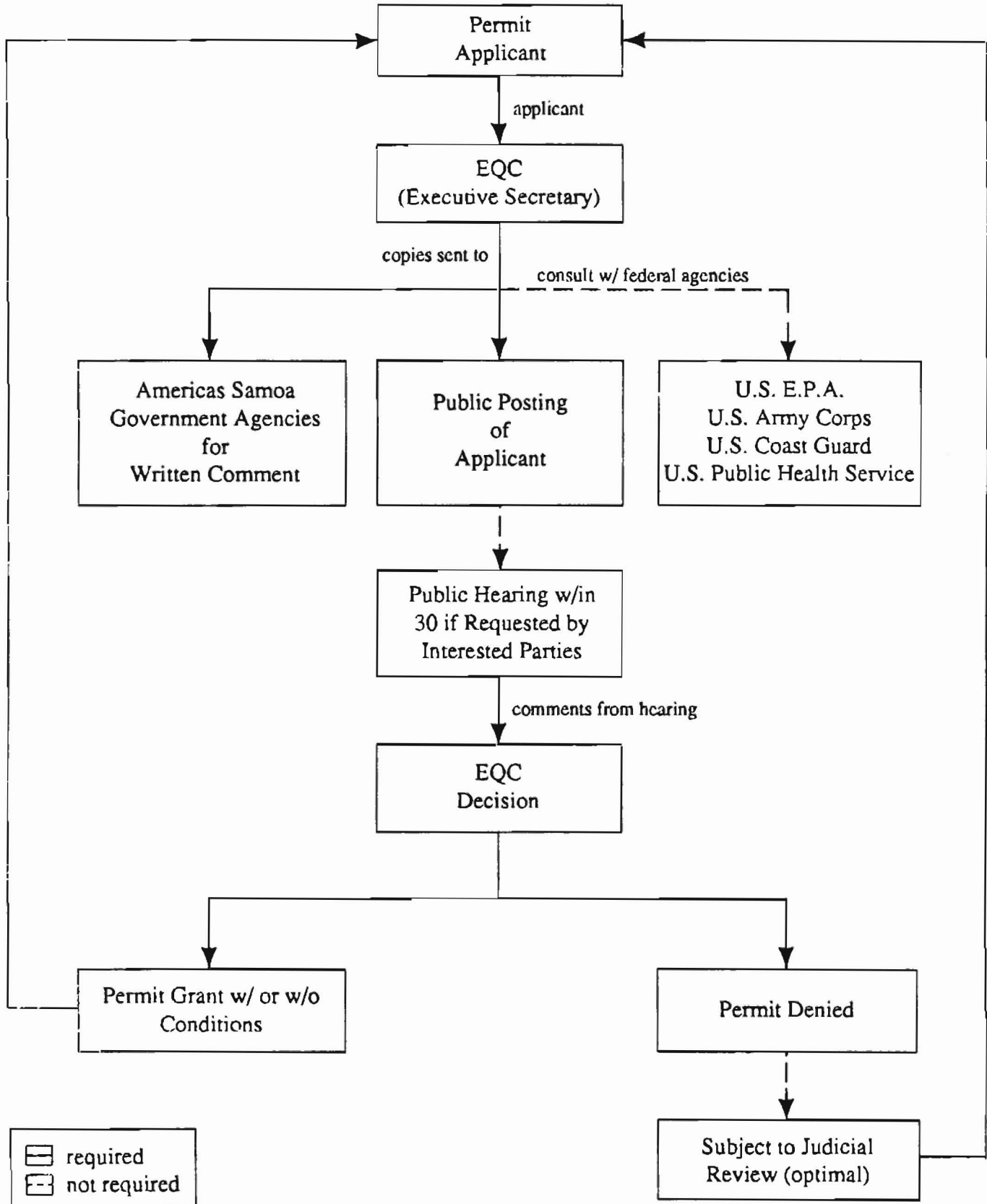
The application is publicly posted and a public hearing may be held if requested by an "interested party." The term is not defined in the regulation or the Administrative Procedures Act.

Copies of the application and supporting documents are forwarded to the American Samoa Government agencies and the Region IX EPA Administrator, the local Coast Guard, the U.S. Army Corps of Engineers, and the Public Health Division of the Department of Health.

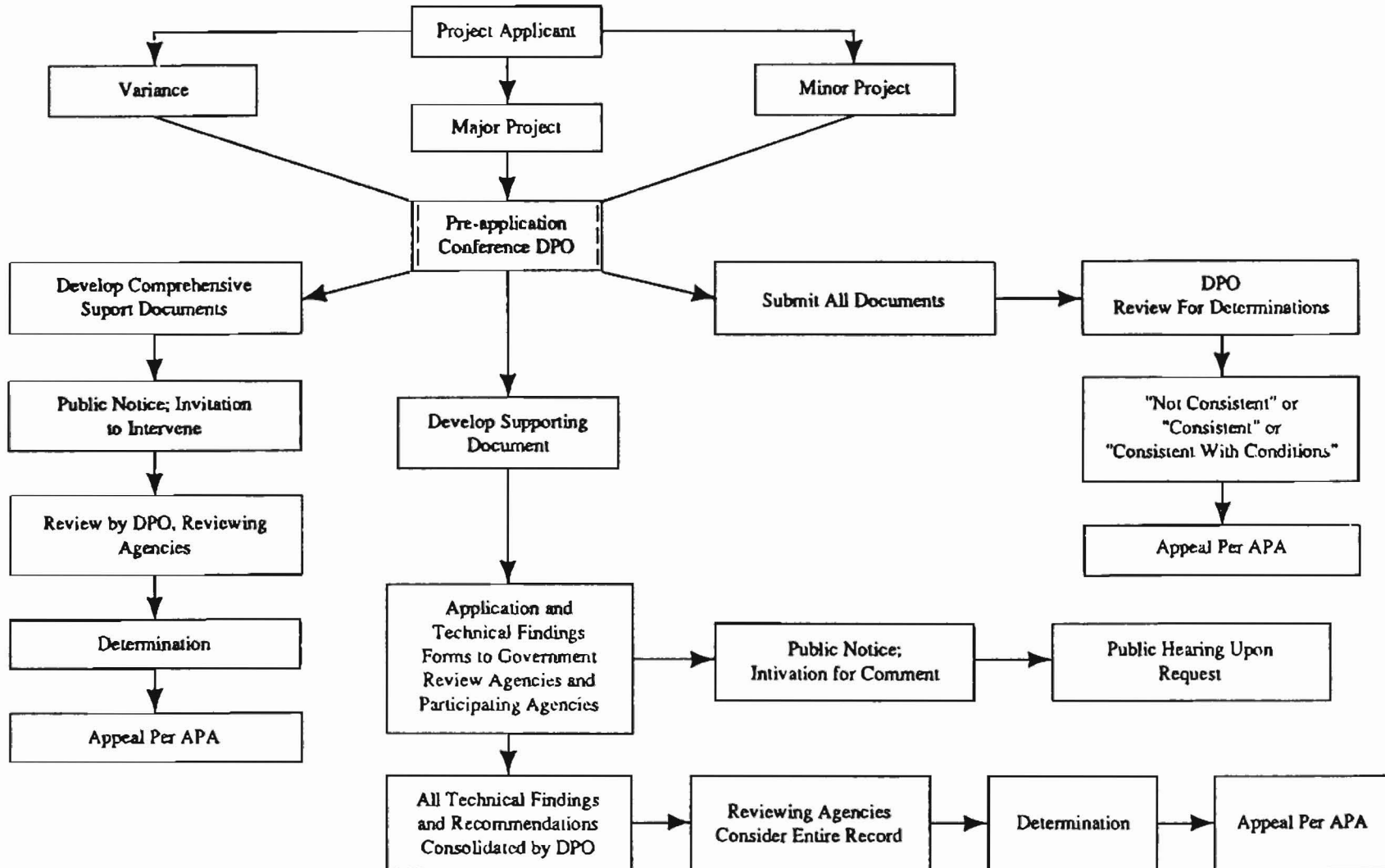
Any person aggrieved by any order prohibiting construction, installation, or establishment of any potential source of pollution shall seek a hearing on the issue before the EQC before commencing other legal or equitable remedies available.

Following a hearing, any person aggrieved by any order of the EQC may petition for relief from the High Court within 20 days of receipt of the order. The arbitrary and capricious standard of review shall be used by the High Court to review action of the EQC.

# PERMITTING PROCESS FOR AIR AND WATER POLLUTION AMERICAN SAMOA



## PROJECT NOTIFICATION AND REVIEW SYSTEM (PNRS)



ENVIRONMENTAL LAWS OF THE  
MARSHALL ISLANDS

By  
Michael Reveal

COAST CONSERVATION ACT 1988

This Act places the administration, control, and management of the Marshall Islands Coastal Zone under the National Environmental Protection Authority. The day to day responsibility devolves upon the Director of Coast Conservation [hereinafter Director]. The Act further creates a permitting system to ensure the long-term stability, productivity and environmental quality of the Coastal Zone. [Part II, Section 9]

The Act states that no person shall engage in any development activity other than a prescribed development activity within the Coastal Zone without a permit issued by the Director of Coast Conservation. This restriction is somewhat vague. No definition of "person" is provided in the Act, nor is "prescribed development activity" defined. "Development Activity" is, however, defined as any activity likely to alter the physical nature of the coastal zone in any way.

Upon application for a permit, the Director may require the applicant to furnish an environmental impact assessment of the project/activity as apart of the application process. No guidance is provided in the Act as to when the Director should request an environmental impact assessment, nor how soon such a determination must be made after receipt of the application.

Upon submission of the EIA by the applicant, a copy is forwarded to the Environmental Advisory Council [hereinafter Council] for review and comment. The Council must submit its comments to the Environmental Protection Authority within sixty days. The Authority has thirty days in which to comment and advise the Director. Public comment is also invited by the Director. After all comments are received by the Director, the Director has thirty days to make a decision either to grant or deny the permit application.



Any person aggrieved by an order of the Director may appeal to the Authority within thirty days of notification of the order. The decision of the Authority is final. No time limit is prescribed by the Act within which the Authority must respond to the appeal. No judicial remedy is provided. It is unclear whether finality of the decision by the Authority is "final" for purposes of administrative review, or indicates that no judicial review is available. This confusion is further exacerbated by the fact that no suit, prosecution or other legal proceeding shall be instituted against the Authority, Director, or any other officer for any act done in good faith. This provision would seem to indicate that no judicial review is possible.

Violations of the provisions of Section 9, Permitting, are subject to fines and imprisonment, not to exceed \$10,000.00 and/or two years in prison.

#### NATIONAL ENVIRONMENTAL PROTECTION ACT 1984

This Act created the National Environmental Protection Authority consisting of a Chairperson and four other members selected by the President in consultation with the Minister of Health Services.

The Act mandates that all Ministries, Departments, Offices, and Agencies of the Government shall, in all matters in which there is or may be an environmental impact, include an environmental impact statement in every recommendation or report on proposals for legislation and other major governmental action significantly affecting the human environment.

An environmental impact statement is described by the Act as a detailed statement on 1) the environmental and cultural impact of the proposed action; 2) any adverse environmental effects which cannot be avoided if the proposal is carried out; 3) alternatives to the proposed action; 4) the relationship between local short term uses of the environment and the maintenance and enhancement of long-term productivity; 5) any irreversible and irretrievable commitment of resources which the proposed action will necessitate if it is carried out.

The party responsible for developing the environmental impact statement is directed to consult with and obtain comments from the public and interested agencies or offices of the Government who might have an expertise or specific information relevant to the project/activity and its impact upon the environment. Copies of the environmental impact statement and any other comments shall be made available to the Environmental Protection Authority and the public well in advance of the completion of the Government decisionmaking process regarding the project.

The Act further provides that any agency of the national or local governments or any person may maintain an action in court for declaratory and equitable relief against any person or body for the protection of the air, land, water, or other aspect of the environment from pollution, impairment, or destruction.

NATIONAL ENVIRONMENTAL LAWS AND REGULATIONS  
OF THE  
FEDERATED STATES OF MICRONESIA

Compiled By  
Michael Reveal

FSM ENVIRONMENTAL PROTECTION ACT --- PUBLIC LAW NO. 3-83  
[25 F.S.M.C. 501 et. seq.]

Policy

The policy of the Federated States of Micronesia (FSM), in cooperation with state and municipal governments and other concerned private and public organizations, is to use all practicable means to foster and promote the general welfare and to create and maintain conditions such that man and nature may exist in productive harmony. [Sec. 2(1)]

Definitions

Within the context of the statute "person" means not only government entities, but also public and private organizations and individuals. [Sec. 3(3)]

Environmental Protection Board

The Act created within the Office of the President an Environmental Protection Board composed of five individuals appointed by the FSM President, one each from the various states of the FSM and one at-large member. Each member serves for a two-year period with the possibility of reappointment for two more years. [Sec. 4(1)]

The Board is required to meet at least twice a year. The functions of the Board are administered by an executive officer appointed by the President of the FSM. [Sec. 8]

The Board each year shall draft a report on the environment to be transmitted to the President and the Congress. The report shall discuss 1) the status of the major natural, manmade, or altered environmental classes,

2) current and foreseeable trends in environmental management and quality of these classes and how these trends effect the socio-economic status of the FSM, 3) the adequacy of available resources to meet human and economic requirements, 4) a review of the environmental effects of the programs and activities of governmental and private entities, and 5) remedial programs designed to correct deficiencies of existing programs or activities, together with recommendations for legislation. [Sec. 9]

The Environmental Protection Board shall have "the power and duty to protect the environment, human health, welfare, and safety and to abate, control, and prohibit pollution or contamination of air, land, and water." The Board is further mandated to balance "the needs of economic and social development against those of environmental quality" and to adopt regulations consistent with these goals and established policy. [Sec. 10]

The Act establishes a permitting system to be administered by the Board to control the discharge by any person of "any pollutant in the air, land, or water, or for the conduct by any person of any activity...which may result in the discharge of any pollutant. [Sec. 11(6)]

The Board may further enter into written cooperative agreements with the various states or state agencies to identify local environmental concerns and to act as the Board's agent in implementing environmental programs at the state level. [Sec. 12(1)(a-e)]

### Environmental Impact Statements

The Act requires the national government of the FSM and its agencies to prepare an environmental impact statement (EIS) prior "to taking any major action significantly affecting the quality of the human environment." The requirement of submitting an environmental impact statement extends to any action funded in any part by the National government or its agencies. In such a case, the recipient of government funds is required to submit the EIS to the Board. [Sec. 13(1)]

The EIS shall be a public document and shall include a detailed statement on:

- 1) the environmental impact of the proposed action;
  - 2) any adverse environmental effects which cannot be avoided should the proposal be implemented;
  - 3) the alternatives to the proposed action;
  - 4) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and
  - 5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.
- [Sec. 13(2)(a-e)]

### Enforcement

Any person who violates any provision of the Act, or any permit or regulation promulgated by the Board shall be subject to enforcement action. The Board is empowered to issue a cease and desist order, or an order to clean up or abate any pollution, to impose civil penalty up to \$10,000.00 per day of the violation, to commence civil actions for damages and/or injunctive relief. [Sec. 15]

### Judicial Review

"Any person who is or will be adversely affected by the enforcement of any standard, policy, regulation, permit, order, or penalty of the Board and who alleges its invalidity may file a petition for a declaratory judgment in the Trial Court of the FSM Supreme Court." [Sec. 17]

## REGULATORY PERMITTING

MARINE AND FRESH WATER QUALITY STANDARDS

AIR POLLUTION CONTROL STANDARDS

PESTICIDES

SEWAGE DISPOSAL

### General Comment

Existing permitting regulations of Palau are based on regulations promulgated by the Trust Territory Government. Generally, the permitting process applies to private and government enterprises alike and is controlled by the Environmental Quality Protection Board (Board). Private ventures, unlike major government projects, are exempt from developing comprehensive environmental impact assessments (EIA) for their projects. The requirements of the permitting processes, however, are inadequate to completely evaluate the potential environmental damage that may result from increased pollution discharge either into the water or the air, or from erosion. The fact that a discharge will be within existing standards may not be sufficient given the public policy to maintain and restore the environment. Lack of a requirement to investigate and discuss reasonable and practicable alternatives hampers the overall goal of the Board to enhance the environment.

Further, there is no requirement for public comment on a proposed discharge permit. All information is to be provided by the individuals requesting the permit. A procedure for public comment should be incorporated into the regulations. This may already exist, however, in regulations governing administrative procedures. The environmental regulations, however, should indicate that certain administrative procedures do apply and cite the applicable act or regulation.

## SOLID WASTE MANAGEMENT PERMIT SYSTEM REGULATIONS

This regulation requires an EIA of the proposed site for a solid waste disposal facility or any extension of an existing facility. No public comment is provided.

## PUBLIC WATER SUPPLY SYSTEMS REGULATIONS

Construction of public water systems are not subject to permitting, but must be approved by the Board. Extensive description of the project is required. No EIA, however, is required by the regulation. The regulation states that disapproval must be accompanied by written appropriate environmental reasons for the denial. Without an EIA prepared for the project, it may be difficult to fully address the environmental consequences of construction of the public water system. Moreover, it is quite possible that such construction is a "major" government project subject to EIA by statute. Because the regulation does not specify a requirement for an EIA, the classification of the project as "major" may be litigated thus delaying the completion of the project.

## CONTROL OF EARTHMOVING AND SEDIMENTATION

This regulation is similar to an earlier Trust Territory regulation governing this area. Permitting is required of any person engaging in earthmoving activity. Person has the same meaning as in the Environmental Protection Act as outlined above.

An environmental impact assessment is not required. The Secretary of Human Resources may conduct a public meeting to determine the facts surrounding the proposed earthmoving. A unique feature of the regulation requires entities issuing loans or permits to build to notify the Secretary upon receipt of an application for a loan or building permit that involves earthmoving activity. No loan for or building permit involving earthmoving activity shall be issued until an earthmoving permit is granted by the Secretary of Human Resources.

Violations of this regulation are subject to enforcement including orders to cease and desist, civil penalties, and/or civil actions for damages and injunctive relief. The cease and desist order shall be effective upon issuance. A public hearing, however, shall be held to determine the facts of the case. The right of appeal from such orders is not provided in the regulation, but may be covered in separate regulations or statutes.

### Comment

Earthmoving may result in considerable pollution. It would appear the Environmental Protection Board would be the most appropriate agency to issue permits for earthmoving. There is no provision for local administration of permitting functions. As the regulation stands, all earthmoving activity, even on the most remote island, must be coordinated through the FSM Secretary of Human Resources. The Environmental Protection Act enables the Board to delegate certain duties to state and municipal governments. Earthmoving activities would appear to be an activity that could be efficiently handled by local agents of the Board, subject to review by the Board depending upon the extent of the earthmoving operation.

### Environmental Impact Assessment

This regulation is promulgated by the Secretary of Human Resources (hereinafter Secretary) pursuant to 25 F.S.M.C 610 and 25 F.S.M.C. 702 to implement Section 13, Environmental Impact Statements, of the FSM Environmental Protection Act. The regulation establishes standard procedures for the preparation and review of an environmental impact assessment statement (EIA Statement) prior to taking or funding any major action that may significantly affect the quality of the human environment. [Part I. 1.1, 1.2] The regulation contains two appendices, "Examples of Significant Impacts" and "Initial Assessment Environmental Checklist."

The term "EIA Statement" is used to distinguish between documents prepared under this regulation and "environmental impact statement" documents required under the U.S. National Environmental Policy Act, applicable for U.S. federal agencies' major actions in the FSM, pursuant to Article VI of the Compact of Free Association. [Part I. 1.3(d)]



The project proponent conducts the EIA itself or may contract for EIA preparation. In either event, the project proponent is entirely responsible for the adequacy and timely submission of the EIA Statement. [Part II. 2.1] The term "project proponent" refers to the FSM National Government or its agencies or therecipient of funding from the FSM National Government or its agencies, that proposes to undertake any major action significantly affecting the quality of the human environment. [Part I. 1.3(1)]

The project shall not commence nor shall funds be released for the project unless the Secretary has determined that the EIA Statement is sufficient. Moreover, no permits shall be issued until the EIA Statement is deemed sufficient by the Secretary. [Part II. 2.2]

The EIA shall be conducted early in the decision making process for the project to ensure that environmental values are considered and that alternatives remain viable and not foreclosed. [Part III. 3.1] An initial assessment, meaning a concise, preliminary assessment of the environmental impacts of a project [Part I. 1.3(1)], is conducted shall be conducted for projects that do not appear to have significant environmental effects. The initial assessment is submitted to the Secretary for evaluation. [Part IV. 4.4] If it becomes apparent via this study or otherwise that the proposed project may cause significant environmental impacts, a comprehensive EIA must be conducted and an EIA Statement prepared. [Part III. 3.3]

The regulation provides specific guidance for the completion of a comprehensive EIA Statement. [Part V.5.2(a-j)] The project proponent shall elicit comment from appropriate agencies and the public to prepare a draft EIA Statement which is in turn submitted to the Secretary, other agencies and the public for further comment. A final EIA Statement is prepared and submitted to the Secretary for approval.

A key link in the approval process is the evaluation by the agencies having authority for the project's funding or approval to determine the existence of "any practicable alternative or practicable mitigation measures, within its powers or the powers of the project proponent, that would substantially lessen [to an acceptable level] any significant impact

the project would have on the environment...." [Part V. 5.3] Final approval, however, rests with the Secretary. [Part V. 5.3(d)]

The contents of the EIA Statement covers the following areas: 1) summary; 2) description, purpose, and need for the project; 3) description of the environmental setting; 4) environmental consequences of alternatives including the proposed project; 5) organizations and persons consulted. [Part VI].

Appeals from the decision of the Secretary shall be taken pursuant to the FSM Administrative Procedures Act, 17 F.S.M.C. 108 et. seq. [Part VII].

## PALAU ENVIRONMENTAL PROTECTION STATUTES

ENVIRONMENTAL PROTECTION 24 PALAU NATIONAL CODE (PNC) 101 et. seq.Policy

The Environmental Quality Protection Act [24 PNC 101 et. seq.] established the Environmental Quality Protection Board to restore and maintain the environmental quality of the Republic of Palau. The Act mandates that all practicable means and measures, including financial and technical assistance, will be used in a "manner calculated to foster and promote the general welfare, to create and maintain conditions under which humankind and nature can coexist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of the Republic." [24 PNC 102(a)]

The government assumes the responsibility to improve and coordinate governmental plans, functions, programs, and resources such that the government may:

- "(1) Fulfill the responsibility of each generation as trustee of the environment for succeeding generations;
- (2) Assure for all Palauans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- (3) Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences; and
- (4) Preserve important historical, cultural and natural aspects of our Palauan heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice."

[24 PNC 102(b)]

"To the fullest extent possible, the Secretarial Orders, policies, regulations and public laws applicable in the Republic shall be interpreted and administered in accordance" with the policy outlined above.

[24 PNC 141]

### Permits

The Environmental Quality Protection Board administers a permit system whereby any person is required to obtain a permit to discharge "any pollutant in the air, land, or water, or for the conduct by any person of any activity, including, but not limited to, the operation, construction, expansion or alteration of any installation which results in or may result in the discharge of any pollutant in the air, land or water."

[24 PNC 129(b)]

A "person" under this statute is defined as "the Republic of Palau, a state, a political subdivision, a public or private institution, corporation, partnership, joint venture, association, firm, or company organized or existing under the laws of the Republic or of any state or country, a lessee or other occupant of property, or an individual, acting singly or as a group." [24 PNC 103(e)]

### Composition of Environmental Impact Statements

A detailed environmental impact statement shall be developed by the responsible official of all national government agencies and all state governments recommending or reporting on proposals for legislation or other "major government actions significantly affecting the quality of the human environment." [24 PNC 142(c)]

The environmental impact statement shall include discussion on:

- (1) the environmental, including cultural, impact of the proposed action;
- (2) any adverse environmental effects which cannot be avoided should the proposal be implemented
- (3) alternatives to the proposed action;
- (4) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and
- (5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

[24 PNC 142(c)(1-5)]

#### Consultation with Expert Agencies and Public

The official responsible for developing the environmental impact statement shall consult with and obtain the comments of the interested public and any national government agency which has jurisdiction by law or special expertise with respect to the environmental impact involved. The EIS shall accompany the proposal through the review process. [24 PNC 143(a)]

At this stage of the proposal development, the Board should determine the feasibility of compliance with the various permitting regulations governing the proposal.

#### Statement of Basis and Purpose of Proposal

The resultant decision on the proposal shall be explained in a statement of basis and purpose and shall present findings which include, but are not limited to, the following:

- (1) the environmental impact of the proposed action has been studied and considered by the responsible governmental agency;
- (2) alternatives to the proposed action have been given reasonable consideration;
- (3) any adverse environmental effects which cannot be avoided by following reasonable alternatives are justified by other stated considerations of national policy;
- (4) any local short-term uses of the environment are consistent with maintaining and enhancing long-term productivity; and
- (5) any irreversible and irretrievable commitments of resources are warranted.

[24 PNC 143(b)(1-5)]

#### Board Enforcement

If the Board determines that a discharge of waste is taking place or is threatening to take place the Board shall issue a cease and desist order. [24 PNC 162(c)] A public hearing shall be convened to determine the facts of the suspected discharge. [24 PNC 162(d)] If the facts obtained at the public hearing support the allegation of discharge, the cease and desist order shall be final and effective. [24 PNC 162(e)]

If those responsible for the discharge fail to comply with the orders of the Board, the Board may request the Minister of Justice who shall petition the Trial Division of the Supreme Court for the issuance of an injunction, writ of mandamus or other appropriate remedy to enforce compliance. [24 PNC 162(f)]

### Private Right of Action

The Minister of Justice, any political subdivision of the Republic, any agency, or person may seek declaratory and equitable relief in the Trial Division of the Supreme Court against the Republic, any political subdivision of the Republic, any agency, or person for the protection of the air, water and other natural resources and the public trust therein from pollution, impairment or destruction.

[24 PNC 163]

### Comment

The Environmental Quality Protection Act (EQPA) extends the requirements for EIA to projects proposed by both government and private parties. In addition, permitting requirements embody much of the informational content of an EIA, and the Board is empowered to require any information felt necessary to the decisionmaking process.

The agency or government entity responsible for the proposed project must engage in consultation with other agencies and the interested public in developing a comprehensive EIS. The Board is responsible to determine compliance with the various permitting regulations and offer other commentary as necessary.

The project agency bears responsibility for the final decision and must measure the impact upon the environment against the benefit resulting from implementation of the project.

Assuming the project proceeds, the Board may, if a pollution discharge is suspected, order further work on the project to stop, pending a public hearing. The Board may petition the Court for equitable and injunctive relief against those responsible for the project. The public, moreover, is guaranteed a private right of action to contest the proposed project and the impact on the environment that may result.

Recommendations

- (1) The language of the EQPA should address both the triggering criteria and the content requirements of the EIA process more explicitly.
- (2) The private right of action provided in this statute is a valuable method to assure compliance with applicable laws and regulations. Such suits, however, are expensive to litigate. To ensure use of this right, attorney's fees should be provided to the prevailing party upon request. Legislation similar to 42 USC 1988 may be considered.
- (3) Regulatory guidance should be developed to facilitate review by the Board of an EIS beyond the mere compliance of the project with existing permitting regulations.



## COMMONWEALTH OF THE NORTHERN MARIANAS--SAIPAN

Commonwealth Environmental Protection Act[Public Law 3-23]

The Constitution of the Commonwealth guarantees a clean and healthful public environment. The Environmental Protection Act accordingly states that it is the policy of the Commonwealth that "necessary and desirable economic and social development proceeds in an environmentally responsible manner in order to promote the highest attainable quality of life for present and future generations." The provisions of this Act and any regulations promulgated pursuant to it apply to the air, land, water, wetlands, and submerged lands, including the Exclusive Economic Zone (EEZ) and areas governed by the Marine Sovereignty Act of 1980.

The Act created a Division of Environmental Quality headed by a Chief who shall report to the Director of the Department of Public Health and Environmental Services. The Chief is responsible for the day to day administration, implementation, and enforcement of all powers and duties relating to environmental protection prescribed by law.

With the approval of the Director, the Chief has the power to issue administrative orders and to request the Attorney General to seek injunctive or other relief to enforce any cease and desist order, provision of a permit, or any statute or regulation. The Chief can also impose fines of \$1,000 per day for violations of permit conditions or regulations.

The Division of Environmental Quality promulgates regulations governing permits for pollutant discharge; transportation, use, storage, and disposal of waste and hazardous substances; and major public and private projects. The Act specifies that applicants for permits may be required to prepare an EIA. Whether or not an EIA is required for a specific project is governed by regulation. In practice, the determination that an EIA is or is not required is made by the Coastal Resources Management (CRM) Board, established pursuant to CNMI Public Law 3-47.

Regulations promulgated by DEQ and CRM provide for specific permitting requirements as outlined below. Generally, EIA is not explicitly required under individual permitting processes. However, most permit actions occur within the fram work of a larger project which may be required by the CRM Board to file an EIA. With the application to satisfy the requirement of submission of evidence to show there is no significant adverse impact on the coastal environment or its resources [see Sec. 8.IV.a-f, P.L. 3-47]. Public review of individual actions is required for major sitings, for which guidelines are established under the CRM Regulations.

#### GROUNDWATER MANAGEMENT AND PROTECTION ACT OF 1988

The Act declares that the groundwater resources belong to the public and that the highest beneficial use of groundwater is for domestic purposes.

The Division of Environmental Quality controls permitting for the siting, design, construction, testing, and repairs or improvements of wells. The Division further ensures groundwater quality and quantity by controlling the withdrawal and use of groundwater.

Both civil and criminal penalties are available to the Chief of the Division of Environmental Quality to enforce provisions of the Act and any regulations issued pursuant to the Act. In addition a private right of action exists to enforce the Act.

The Act requires no EIA to be drafted by the applicant for a well permit, although the Division Chief is directed to establish a maximum allowable daily flow rate based on local hydrogeology "to ensure the protection of public health and environment."

## COASTAL RESOURCES MANAGEMENT (CRM) -- 1984

This regulation governs the permitting process for activity within the coastal zone of the Commonwealth. This regulation facilitates administration of the Coastal Resources Management Program and is consistent with the U.S. Federal Coastal Zone Management Act.

No regulatory language requires a comprehensive EIA for evaluation of the permit applications. Potential impact by the proposed project on air and water, and noise factors are required to be addressed, however, as is alternative site construction. The applicant is required to demonstrate to the Agency by a fair preponderance of evidence "that the project will not have a significant adverse impact on the coastal environment or its resources."

The CRM Administrator and the CRM Agency Officials shall consider the following in evaluating permit applications: [Coastal Resources Management Rules and Regulations of 1984: Section 9.B.i-iv.].

1. determine impact of existing uses on coastal resources and determine whether the additional use will significantly degrade the coastal resources;
2. determine whether requested use is compatible with existing uses;
3. determine whether an alternative site exists; and
4. "determine, to the extent practicable, the extent of the impact of the proposed project on the marine, freshwater, wetland and terrestrial habitat, and preserve, to the extent practicable, the physical and chemical characteristics of the site necessary to support living resources.

## REGULATIONS

### WASTEWATER DISPOSAL SYSTEMS

This regulation governs septic tank construction and usage.

### HAZARDOUS WASTE MANAGEMENT

U.S. federal regulations are incorporated by reference and govern the management of hazardous waste.

### MARINE AND FRESH WATER QUALITY STANDARDS

This regulation provides standards for nongroundwater water quality to protect the water for propagation of fish and wildlife, recreational purposes, public water supply uses, and navigational purposes. Existing standards are under review, and revisions are in preparation to expand the scope of the water quality standards.

### PESTICIDE CONTROL

This regulation governs the use, importation, distribution and sale of pesticides for the protection of the public health and the prevention of environmental contamination.

## EARTHMOVING AND EROSION CONTROL

Although the regulation does not expressly require an environmental impact assessment for specific projects, the regulation does require an environmental effects study in certain circumstances. For example, no permit is required to clear vegetation for landscaping purposes on areas of less than two hectares, if erosion is prevented and there are no adverse environmental impacts on surface water as a result of the clearing operation.

As part of the permitting process, the applicant is required to provide a slope stabilization and revegetation plan that includes a detailed analysis of the environmental effects of this aspect of the project and the effects on slope stability, soil erosion, water quality, and fish and wildlife. Adequate evaluation of the plans submitted with the permit application is hampered because no comprehensive environmental impact assessment is provided for the entire project with discussion of alternatives to project plans and objectives.

## AIR POLLUTION CONTROL REGULATIONS

The regulation reemphasizes the constitutional guarantee of a clean and healthful environment. The express policy is to maintain optimum levels of air quality in order to protect and preserve public health, general welfare, and the aesthetic quality of the air. The regulation also ensures that necessary and desirable economic and social development proceeds in an environmentally responsible manner.

The regulation governs the permitting of all new sources and the modifications of major sources of airborne emissions. Registration of existing sources is also required.

Applications for permits are processed by the Chief of the Division of Environmental Quality. Applications are to be accompanied by copies of all "complete data, siting information, plan description, specifications, drawings, and other detailed information necessary to determine in what manner the new sources will be operated and controlled."

A public hearing process is provided in which interested persons may present either written or oral comments on the air quality impact of the source or modification, the control technology required, and other appropriate considerations. Applicants are provided opportunity to respond to public comments to the Chief.

Approval of an application is based on the following criteria:

1. The new source is designed, built, and equipped in accordance with reasonably available control technology,
2. The new source is designed and will be constructed or modified to operate without causing a violation of applicable rules and regulations,
3. The new source will not endanger the maintenance or attainment of applicable national ambient air quality standards or ambient air increments,
4. New sources or major modifications meet the US permitting requirements for Prevention of Significant Deterioration of Air Quality in addition to requirements of current Commonwealth air quality regulations.

#### COMMENT

The regulation does not require the applicant to prepare an EIA in addition to the other material relating to the construction or modification of the emission source. The public, however, may comment upon the air quality impact. The Chief does not have to evaluate alternative proposals for the new emission source. Further, the new source need only meet a "reasonably available control technology" standard, instead of a "best available" standard.

## GUAM ENVIRONMENTAL PROTECTION AGENCY

### Administration [10 GCA 45101 et. seq.]

A Board of Directors, composed of nine individuals appointed by the Governor with the advice and consent of the Legislature, manages the Agency and develops policy. The Administrator and Deputy Administrator, appointed by the Board, manage the administrative affairs of the Agency.

Regulations promulgated by the Agency are subject to confirmation by the Legislature. Any regulation, however, is considered approved and effective, if not expressly approved or rejected by the Legislature within 45 days.

The Agency is responsible for the implementation of the Water Resources Conservation Act, the Water Pollution Control Act, the Toilet Facilities and Sewage Disposal Act, the Air Pollution Control Act, the Guam Pesticides, Safe Drinking Water Act, and the Solid Waste Management and Litter Control Act.

None of these acts specifically requires the development of an EIS in the preparation of applications for licenses. For the most part, required documentation is left to the discretion of the Administrator.

### Applicability of NEPA

Actions of Guam government agencies that involve even minimally U.S. federal funds, U.S. federal lands, or U.S. federal permits come under the aegis of NEPA and relevant U.S. agency regulations.

Procedures for drafting environmental impact assessments to conform with U.S. NEPA regulations are outlined in A Guide to Environmental Assessments and Environmental Impact Statements (1980) prepared by the Guam Environmental Protection Agency.

### Water Resources Conservation Act

All of the water resources of Guam are the property of the people of Guam. The waste or unreasonable use or diversion of water is prohibited. No person shall engage in well drilling without a permit. An application for a license shall be made on a form prescribed and furnished by the Guam EPA Administrator. The information required for the permit application is determined by the Administrator.

### Water Pollution Control Act

A permit is required to substantially increase the discharge of waste into the waters of Guam or alter the physical, chemical or biological properties of the water. The documentation required for the permit is dependent upon requirements established by the Administrator.

### Air Pollution Control Act

Permits are required prior to the construction or modification of any stationary air pollution sources, or the use of any equipment or device that may contribute to increased air pollution. The Guam EPA shall require information with regard to plans, specifications, and other documentation as necessary in order to process the permit application.

### Air Pollution Control Regulations

The permitting process for all new major potential sources of air pollution requires the development of an air quality impact analysis. Part of this analysis entails discussion of the "impairment to visibility, soils, and vegetation that would occur as a result of the proposed [new pollution point source] and general commercial, residential, industrial and other growth associated with the major pollution source."



### Solid Waste Management and Litter Control Act

The Guam EPA Administrator issues permits for solid waste management facilities, including design, operation, maintenance, substantial alteration, modification, or enlargement. All permits are non-transferable.

Prior to issuing a hazardous waste management permit for any facility designed for the processing, storage, or disposal of hazardous waste, the Administrator shall provide public notice of intent to issue a permit. The public has 45 days in which to express opposition to the permit and request a hearing to be conducted according to the Administrative Adjudication Act.

### Safe Drinking Water Act

The purpose of the Act is to protect public water supplies from contamination. Primary and secondary drinking water regulations apply to each public water system in Guam including those operated by the Guam government and the federal government. Any underground injection program shall not endanger the drinking water sources of Guam.

### Underground Injection Control Regulations

The application for a permit to engage in underground injection must include a list of environmental alternatives considered and the reasons for nonacceptance of the alternatives. Information relevant to the effect of the activity on the aquifer, such as drilling near the site, are required in the application. A public hearing will be provided, if requested, to receive public comment about the proposed injection program.

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1. "POTENTIAL PROJECTS IN THE PACIFIC AND THEIR IMPACTS [title slide]
  2. It seems only yesterday that European explorers first discovered the Pacific islands. Magellan and others who followed him introduced the world to an entirely new and exotic part of the Earth. [sunset shot]
  3. At one time, islanders lived intimately with their land and sea. [gleaners on reef, Truk]
  4. After the second world war, the Pacific islands had to adjust from being remote outposts to becoming members of a world economy. [harbor scene]
  5. With the changing political scene in the Pacific, economic independence is especially important to the U.S. affiliated island states. [Guam legislature]
  6. Islanders are adjusting to rapid changes as foreign aid and investments inject money into the local economy and provide jobs. [new building behind rural scene]
  7. As the economies grow, populations grow, families migrate to urban areas, and lifestyles change. These economic and social changes exert growing pressures on island environments. [family]
  8. With limited land area available for development, there's only so much room for new hotels, roads, and harbors. [Guam aerial view]
  9. There's only so much sewage and other wastes that can be dumped into the ocean. [dumping/sewage]
  10. By asking the right kinds of questions, islanders can best balance social and environmental costs with economic benefits. [islanders]

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11. The purpose of this presentation is to show: (1) what kinds of development in the U.S.-affiliated Pacific Islands might be of concern to islanders; [Nikko Hotel, Saipan]
  12. (2) what kinds of impacts need to be studied to prevent unacceptable changes to the environment; [dredging scene]
  13. and (3) possible ways to reduce or eliminate undesirable impacts. [causeway]
  14. TITLE SLIDE: MAJOR TYPES OF DEVELOPMENT [title slide]
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15. Not too long ago, most Pacific islanders subsisted on food harvested from the land and sea. Many islands once relied on copra export or supplying foreign ships with food and water. [islanders]
  16. Today, many islands are turning to other forms of economic development. The main "export" or primary industries being considered include tourism ... [tourists on beach]
  17. and fisheries. These activities bring in valuable outside dollars to the local economy. [fisherman]
  18. A variety of improvements usually come with economic development. These include modern hotels, clean, reliable water supplies, solid waste and sewage disposal, adequate roads and airports, electricity, and housing. [hotel interior].
  19. Tourism is the fastest growing economic activity in the world. [title slide -- Tourism]

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20. With more leisure time and personal income, modern jets, and development of new destinations, the number of travelers has increased considerably in the past 10-20 years. [Japanese tourists]
  21. Tourism has been growing significantly in the Pacific basin. Today, travelers from the U.S., Europe, Japan, Australia, and New Zealand are filling up hotels throughout the Pacific -- especially at major destinations such as Hawaii, Guam, and Saipan. [Waikiki Beach scene]
  22. Other destinations such as Palau, Pohnpei, Truk, and Samoa may become more popular for diving, nature travel, or just escape from everyday stresses. [diver scene]
  23. The Japanese have become a major force in building new hotels and resorts, as well traveling to Pacific islands -- especially in Micronesia. Aside from Hawaii, Guam and Saipan are the two most popular destinations for Japanese travelers. [Japanese tourists]
  24. Projections for tourism growth vary -- but some Pacific islands expect significant growth in the future. For example, Saipan predicts that hotel rooms could double by the year 2000 -- accommodating nearly a half-million visitors a year. [hotel under construction]
  25. Other areas such as Samoa, the Federated States of Micronesia and the Marshall Islands project much more modest increases in tourism -- mostly due to limited air transportation and infrastructure. [Samoa scene]
  26. Tourism development raises several types of concerns. First, overdevelopment could burden the existing infrastructure of roads, [traffic scene]
  27. airports, water supply, waste disposal, and electricity production -- much of which is already inadequate. [Truk airport]

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28. Second, increased development could destroy the natural, scenic, and cultural attractions that attract tourists. [coastal scene-Samoa]
  29. Third, more tourists in some island communities could erode traditional values and lifestyles important to residents. [girl with radio]
  30. Fisheries and Aquaculture. The harvesting or culturing of fish and other aquatic life offers opportunities for economic development. [title slide]
  31. The new 200-mile exclusive economic zones around various Pacific islands have created millions of square miles of new territory. Migratory fish such as skipjack tuna, mahimahi, and various billfish are already being taken by foreign fishing vessels. [EEZ map]
  32. While island states can gain income from selling fishing rights to various operators, they can also benefit from other support activities such as fish processing, ship repair and maintenance, fueling, and provisioning. [dry dock]
  33. Fisheries development raises concerns about overfishing. For example, drift-netting, which involves miles of open-ocean nets acting like a vacuum cleaner at sea, is a special concern to fishery managers. [ship with nets]
  34. A shoreside support operation, such as a harbor or shipyard, could add sewage, oil, and hazardous wastes to nearshore waters. [harbor]
  35. A fish processing plant could create waste products that need proper disposal. In addition, nearshore subsistence fisheries -- already depleted in many areas -- could be further stressed if reef fish were harvested for fish processing. [Star-Kist plant]

- =====
36. Coastal aquaculture is being considered by some island states. Various species are being studied for commercial pond cultivation -- including mullet, milkfish, and rabbitfish. [pond harvest scene]
  37. The clearing of mangrove forests for aquaculture ponds and facilities could be a concern. Effluent from the operation could also degrade water quality in nearshore waters. [cleared area]
  38. Also being considered is the restocking of species in the wild. Candidates include the giant clam and topshell. The impact of "reseeding" areas may need to be studied; for example, restocking topshells could reduce algae on the reef -- resulting in fewer algae-feeding fish. [MMDC]
  39. The introduction of any new species needs to be closely studied and monitored to prevent undesirable plants and animals from establishing themselves. [lab scene]
  40. Military Installations. Military bases and related operations are important to the economies of several U.S.-affiliated islands. [title slide]
  41. For example, on Guam, Andersen AFB and the US Naval Station at Apra Harbor are two major bases with nearly 10,000 personnel plus dependents. [Guam aerial of base]
  42. Military bases also hire many resident civilians who are attracted to urban centers. One of the extreme examples of this is found on Ebeye, where 11,000 residents live on a tiny island -- many of whom work on nearby Kwajalein. [Ebeye scene]
  43. Military bases produce significant amounts of hazardous wastes which require proper disposal. Other concerns include the impacts of military maneuvers on fringing reefs and beaches. [bombers on runway]

- =====
44. Production and manufacturing. Among other economic activities being considered is garment manufacturing... [title slide]
  45. which could increase the immigrant labor force for the factories. The increased population could burden public infrastructure such as water, sewage, and solid waste disposal. [factory]
  46. Harvesting wood. Harvesting mangroves for firewood and construction is possible in areas such as Kosrae, Pohnpei, Yap, Palau, and Truk. [title slide]
  47. For example, Pohnpei and Palau have extensive mangrove forests -- about 26,000 acres total. Controlled harvesting is needed as mangrove forests are important in keeping nearshore water sediment-free and providing a home for many marine and estuarine species. [mangrove clearing]
  48. Mining and quarrying. In some areas, mining and quarrying of limestone and rocks from reefs are important sources of aggregate, paving, and construction materials. [title slide]
  49. However, if not properly done, these types of activities can destroy important habitat and degrade water quality. As pressures increase for various types of construction, the demand for building and road materials will also increase. [reef quarry]
  50. Solid Waste Landfills are needed to handle growing amounts of garbage. [title slide]
  51. With a more modern "disposal" lifestyle, islanders now throw away mountains of styrofoam cups, disposable diapers, plastic bottles, and tin cans. [kids in dump]



- =====
52. Larger items such as appliances, furniture, and junked cars also end up cluttering the landscape. Besides being eyesores, the growing amount of solid waste is also a public health problem and a threat to scarce drinking water. [dump scene]
53. Proper designation and management of landfills are needed to prevent leaching of pesticides and heavy metals, the spread of infectious diseases, and underground fires. [dump scene]
54. If improperly managed, trash from landfills can also be spread across the landscape by wind and water. [dump scene]
55. In the future, some of the islands will be hosting garbage from the rest of the world. For example, an American company plans to ship household garbage from the U.S. west coast to landfills in the Marshall Islands, earning the republic millions of dollars a year. [aerial of islands]
56. Sewage Treatment Plants. One of the constraints to economic development is the capacity of sewage treatment plants. [title slide]
57. In many Pacific islands, sewage facilities are inadequate to handle rapidly growing urban areas. In 1983, when Truk had a cholera outbreak, visitor arrivals plummeted 43%. [plant]
58. Inadequate treatment also threatens an island's water supply and lagoon waters. Clearly, "benjo's" are not enough to protect public health. [lagoon scene]
59. To meet the increased demands of a growing population and tourism, a number of islands plan to build new sewage treatment plants, collector lines, and ocean outfalls; the improvements will be costly -- but necessary for the future. [project sign]

- =====
- 60. The construction of sewage treatment plants raises concerns about the impacts of releasing treated sewage into nearshore waters -- especially if the wastewater has not received advanced treatment. Also, sludge from the plants will need proper disposal. [EPA sign]
  - 61. Water Supply Development. Water supply is a major concern in the Pacific islands. [title slide]
  - 62. In addition to a lack of adequate water supply and modern systems, contamination is a major problem in many areas. [reservoir]
  - 63. As pressures increase for economic development, particularly tourism, adequate and safe drinking water must be provided. Water managers will also need to ensure water use does not exceed or damage the supply. [dried up reservoir]
  - 64. Transportation (air, land, water). Economic development requires the efficient flow of goods and people to and from the various Pacific islands. [title slide]
  - 65. Without ships, the islands would be cut off from outside supplies of food, construction materials, equipment, parts, and other daily necessities; also, the islanders would not be able to ship their products to their various markets. [harbor scene]
  - 66. Without modern jets, the flow of tourists would slow down to a trickle. [airport scene]
  - 67. Airports are now a major lifeline for the urban centers. Saipan's international airport now handles about 200,000 arrivals a year, compared to just 52,000 in 1976. This required longer runways, expanded terminal facilities, and more efficient baggage handling. [Saipan Airport]

- =====
68. Although FSM's four major airports can handle 727's, the airports cannot serve more visitors without major improvements. If some of the island states desire tourism growth, significant improvements to airport facilities will be needed. [Yap Airport]
  69. Some concerns which need to be addressed include: increased airport noise, more fuel storage facilities, larger numbers of travelers, and construction of runways on fringing reefs. [Majuro Airport]
  70. Improved roads seem to be another priority for some islands. Many roads, dating back to World War II days, will be strained by continued growth of island economies. [poor road]
  71. Road construction needs to be studied carefully to avoid destroying important wildlife habitat or natural areas such as mangrove forests. Also, the social impacts of opening up remote areas to more traffic need to be considered. [road construction]
  72. Energy Production and Fuel Facilities. With economic development comes increasing demand for energy -- [title slide]
  73. to fuel aircraft and ships, to produce electricity, to run cars and trucks, and to operate sewage treatment plants. [airplane fueling]
  74. In addition, in urban centers, residents and visitors use more energy for conveniences such as refrigerators, air conditioners, and water heaters. [refrigerator]
  75. As energy demand increases -- without developing alternate sources of energy -- there will be increased pressure for more oil-powered plants, diesel generators, distribution lines, and fuel storage. [power plant]

- =====
- 76. Increased dependence on petroleum products -- all of which must be imported -- drains the economy and diverts funds from other important needs. [tank farm]
  - 77. Impacts that need to be considered include the potential damage from oil spills, loss of habitat, coral kill by warm waste water from power plants, air pollution, and leaching from waste ash disposal. [tanker]

CHANGE SLIDE TRAY HERE

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BEGIN SLIDE TRAY 2 HERE

1. Residential development. It has been the experience in the Pacific islands that workers will move to where jobs are located. [title slide]
2. This often creates a major housing problem as urban centers attract more and more outer islanders. As mentioned earlier, the island of Ebeye is possibly the worst example of this. [Ebeye scene]
3. In addition, populations are generally growing rapidly, sometimes explosively. For example, the population of CNMI is expected to double by the year 2000. [girls]
4. Together with the existing housing shortages, population growth will increase pressure for housing projects in the little area that is developable -- mostly near the coast. [housing project]
5. The shortage of available land for housing also creates tremendous pressure to fill areas such as wetlands and mangrove forests. This destroys valuable habitat and fish nurseries. [mangrove]
6. Summary. In summary, economic development will likely bring about changes in lifestyle and how islanders use their environment. Effective environmental review will help identify major concerns early in the planning and design stages. [bulldozer]
7. This will help avoid undesirable environmental impacts. If environmental sacrifices must be made, at least the tradeoffs will be made consciously, based on complete information. [Pohnpei resource directory]
8. **POTENTIAL ENVIRONMENTAL IMPACTS** [title slide]

- =====
9. We will now look at how various projects result in short-term and long-term impacts. For example, construction activities such as landfilling, dredging, and excavation lead to various kinds of short-term impacts on the natural environment and people. [clamshell dredge]
  10. An activity such as dredging, however, can produce increased silt in the water which has long-term impacts on the environment (such as killing coral). [aerial of Samoa coastline]
  11. Short-term construction impacts include all effects beginning with site preparation -- such as land clearing or grading -- through completion of the project. [title slide]
  12. For example, the short-term impacts of building a causeway would begin when material is dredged from the surrounding reef and end when the causeway is open to traffic. [graded area-Pohnpei]
  13. Long-term impacts result from the use or operation of a project. [title slide]
  14. For example, the long-term impacts of a small boat harbor might include increased oil pollution and traffic congestion. [harbor]
  15. Short-term Impacts Resulting from Construction Activities. [title slide]
  16. Whether we're talking about reef runways, causeways, hotels, or housing, there will be a "project" that needs to be "built". [construction scene]
  17. The specific construction activity will be different, but there are certain activities which could be harmful to the environment and people. For example, excavation, dredging, landfilling and clearing in coastal areas often damage marine ecosystems. [cleared site]

- =====
18. Excavation/dredging. Excavation and dredging often involves heavy equipment or dynamite. This destroys the bottom environment and creates considerable silt and murky water. [title slide]
  19. The silt kills corals by smothering the coral animals; in addition, the murky water reduces the amount of sunlight needed by corals to live. [dredging]
  20. The actual impact depends on the species of coral, dredging technique used, and the amount of sediment produced. These kinds of effects can be mitigated by measures such as silt curtains to reduce the area affected. [corals]
  21. Improper land grading can also harm marine environments. A big rain can send tons of sediment into nearshore waters. [silt and dead fish]
  22. Explosives. Occasionally, explosives may be used in excavation or dredging to break up hard bottom materials or for quarrying large armor stones for seawalls and breakwaters. [title slide]
  23. Besides the noise and silt produced by explosions, the concussion is probably the most significant impact which can result in fish kills and damage to corals. The impacts of explosives can be mitigated by carefully controlling the siting, placement, charge size, hole preparation, and timing. [broken coral heads]
  24. Clearing. Clearing land for construction often involves grubbing and grading. These activities remove plants and animals and change the shape of the land. [title slide]
  25. Entire habitats such as a mangrove forest or marsh can be eliminated, along with archaeological or historic sites. [cleared area]



- =====
26. The immediate impacts from grubbing and grading can include increased soil erosion (especially during rainy seasons), increased runoff, and "red water" in the nearshore -- leading to coral kills from too much freshwater and silt. [erosion]
  27. In addition to immediate harm to both land and marine ecosystems, improper grubbing and grading can also destroy subsistence fishing and gathering in the nearshore. [fishermen]
  28. Such effects can be reduced by taking steps such as grading during the dry season, contour grading, building effective sediment ponds, and keeping as much vegetation as possible. [construction site]
  29. Long-term environmental impacts. Long after a project is finished -- whether it is an airport, road, or hotel -- there are often impacts which carry on for the life of a project. [title slide]
  30. In the case of an airport, these long-term impacts might include increased tourist traffic, higher demand for fresh water, and more sewage and solid wastes. [airport]
  31. Destruction or disturbance of critical habitat for rare and endangered species could lead to extinction of an island's unique plants and animals such as sea turtles. [turtles]
  32. Landfilling -- the placement of fill material to create dry land -- [title slide]
  33. destroys aquatic habitats such as reefs -- for housing, airfields, and harbors. Over the long-term, however, landfilling can also block water circulation and harm subsistence fishing. [landfilling]

- =====
34. For example, a road causeway can reduce water circulation in a lagoon and thereby decrease water quality. [causeway]
  35. At places such as Pou Bay in Truk, a causeway across the bay mouth restricted ocean water circulation and dilution of raw sewage from villages along the shore. The polluted water also contaminated shellfish and created a health problem. [viaduct]
  36. Shore protection measures associated with various developments such as breakwaters, groins, and seawalls -- [title slide]
  37. are all intended to protect land from waves, currents, and storms. In the case of Pacific islands, these lands are often areas filled for airports, housing, or harbors. Groins built to protect beach houses can interfere with the movement of sand along the coast and starve "downstream" beaches. [groin]
  38. This leads to dramatic erosion down the coast. The long-term cost of such erosion includes replenishment of eroded beaches, loss of recreational beaches, and protective measures such as "sandgrabbers." [beach erosion scene]
  39. Secondary Impacts. Projects can result in various secondary impacts which are not directly related to the project itself. Examples include increased crowding and traffic resulting from population growth, loss of beach access due to hotel development, change in traditional lifestyles with increased contact with visitors, housing shortages, increased crime, and public health problems. [title slide w/bulleted items]
  40. Ciguatera fish poisoning in fish such as jacks can be considered an example of a secondary impact of dredging. [jacks in tubs]

- =====
41. At places such as Palmyra, Johnston, and Bikini Atolls, ciguatera outbreaks followed construction activity. One theory is that dredging creates ideal conditions for the toxin-producing organism responsible for causing ciguatera. [dredging scene]
  42. Summary. The exact short-term and long-term impacts resulting from a given project will depend on a number of factors -- including the existing natural environment, [mangrove forest]
  43. the type of project, its specific location, the timing of the project, size of the project, and planned mitigation measures. [resort project]
  44. The critical first step in avoiding undesirable impacts upon the environment and people is to better understand the project environment. [reef scene]
  45. The next step is to fully understand how the various construction activities might impact the environment. Various alternatives need to be explored to see whether there are other ways to accomplish the project's objectives with fewer adverse impacts.[sand pumping]
  46. Mitigation measures need to be developed to eliminate or reduce these adverse impacts. For example, if a new hotel would block a beach view, one mitigation measure might be to provide a scenic lookout for the public. [scenic lookout at hotel]
  47. Finally, both during construction and after the project's completion, monitoring is essential to prevent unforeseen impacts. [sampling in pond]
  48. An effective environmental assessment process, therefore, must begin when a project is first conceived -- and continue during the life of the project. [construction scene]

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49. This will help protect an island's irreplaceable resources and the well-being of its people. [Ponape mother with child]

50. CLOSING SLIDE [coastal scene]

Workshop Participants  
American Samoa  
June 12 - 14, 1989

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Pam Eastlick	Emery L. Neal

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Island: AMERICAN SAMOA

1      2      3      4      5

### Section I - Definitions

- |   |   |   |   |   |    |
|---|---|---|---|---|----|
| 1. The Definitions were clear and easy to understand      | 0 | 0 | 0 | 6 | 11 |
| 2. The terms defined helped me understand the lectures    | 0 | 0 | 1 | 5 | 11 |
| 3. The workbook materials on Definitions were appropriate | 0 | 0 | 1 | 7 | 9  |
| 4. Comments: What other words should have been defined?   |   |   |   |   |    |
| "Outstanding, more workshops."                            |   |   |   |   |    |

### Section II - Why Assess Impacts

- |   |   |   |   |   |    |
|---|---|---|---|---|----|
| 1. The presentation was clear and easy to understand                          | 0 | 0 | 1 | 6 | 10 |
| 2. The presentation was organized and logical                                 | 0 | 0 | 1 | 5 | 11 |
| 3. The reasons for Assessing Impact made sense                                | 0 | 0 | 0 | 7 | 10 |
| 4. Comments: How might this presentation have been made better                |   |   |   |   |    |
| "Have live pictures (video tapes) and exercises like field trips."            |   |   |   |   |    |
| "Promise more workshops concerning assessment impacts."                       |   |   |   |   |    |
| "Assessment should be done prior to starting a project until the completion." |   |   |   |   |    |
| "Too long"  |   |   |   |   |    |
| "Keep a consistant break limit, for example every 30 min."                    |   |   |   |   |    |
| "Stronger focus on social/cultural aspects would help."                       |   |   |   |   |    |
| "Give out a list of new words and their definitions used in your workshop."   |   |   |   |   |    |
| "Should have more site or practical works."                                   |   |   |   |   |    |

### Section III - Slide Show

- |   |   |   |   |    |   |
|---|---|---|---|----|---|
| 1. Introduction to slide show was good                                      | 0 | 0 | 2 | 10 | 5 |
| 2. Slide show discussed all the important projects & impacts                | 0 | 0 | 1 | 11 | 5 |
| 3. The presentation of the slide show was well done                         | 0 | 0 | 1 | 12 | 4 |
| 4. Each of the topics discussed in the slide show were discussed adequately | 0 | 1 | 1 | 10 | 5 |

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

	1	2	3	4	5
5. The slide show discussed topics relevant to my island	0	3	3	8	2
6. Slide show was well organized	0	0	1	12	4
7. Comments: How could the slide show be improved?					
"Provide more slides to improve discussion."					
"Slide should provide sites here in American Samoa, i.e. PRI tank farms, etc."					
"Take the name of the place that have the impacts."					
"Have more slides on island."					
"Should start with picture of a nice looking Hawaiian wearing a bikini."					
"Show would improve by using video tapes."					
"Should darken the room a little more."					
"More slides on local environment."					

#### Section IV - What EIA Should Do

1. Presentation was clear and easy to understand	0	0	0	12	5
2. Presentation was organized and logical	0	0	0	9	8
3. I have a better understanding of what information should be gathered during the EIA process	0	0	0	6	11
4. Comments: How could this Section have been improved?					
"Use some written cases in the class."					
"Need more on site and networking of agencies involved."					
"Should have gathered more information to make it problemless."					
"Too long."					
"Laws should be applied to every project and must be consistant."					
"Provide off island course to keep up sufficient needs and understanding."					

#### Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand	0	0	0	11	6
2. The presentation was organized and logical	0	0	0	9	8

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

	1	2	3	4	5
3. I understand how checklist are used	0	0	0	9	8
4. I understand how materials are used	0	0	0	8	9
5. I understand how sequence diagrams are used	0	0	0	11	6
6. Comments: How could this Section have been improved?					
"A checklist must be originated by person in charge of different government agencies."					
"Too long."					
"Visit a site using the checklist then discuss in groups then give presentations."					
"Have the class involved in some written examples."					
"More local examples like how Leone Boat Harbor project was evaluated."					

#### Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	0	0	9	8
2. The presentation was organized and logical	0	0	0	8	9
3. I am aware and could identify approach to mitigative measures	0	0	0	9	8
4. Comments: How could the Section have been improved?					
"More time allocated for questions."					
"Allow more time to evaluate these measures by the group."					
"More discussion and participaiton from the participants."					
"Have visual examples in video tapes."					
"Get to the point."					

#### Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	0	1	9	7
2. The background materials covered the project well	0	1	1	9	6
3. The presentation of the description of the project was organized and logical	0	0	0	11	6

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

	1	2	3	4	5
*4. The tank farm was appropriate site for the activity	0	1	2	8	6
5. Working in a group helped me identify impacts and mitigative measure	0	0	0	8	9
6. I enjoyed working in a group for this activity	0	1	0	7	9
7. The group presentations were useful	0	0	0	7	10
8. Comments: How could this section have been improved?					
"Should know what kind of impact to notify."					
"Site should be decided by the participants."					
"Have different site reviews like Cannery."					
"Sharing thought gives more strong and effective solutions."					
"Allow more time for discussions and questions."					
"Have each person write his own report the night before then discuss everything the next day otherwise only one or two are involved in discussion."					
"Do something dealing with individuals rather than groups."					
* There was confusion in the response to this question due to an error in the site name on the evaluation form.					

#### Section X - Local Environmental Laws

1. The presentation was clear and easy to understand	0	0	3	7	6
2. The presentation was organized and logical	0	0	0	9	7
3. I now have a good understanding of the Environmental Laws of my island	0	1	2	9	4
4. Comments: How could this section have been improved					
"By enforcing the laws."					
"More time allocated to get into local laws affecting our people."					
"Speaker spoke too fast."					
"Should update local environmental laws."					
"Laws must be reviewed again by a committee to meet the standard environmental laws."					
"Should have a printed document of current local laws and permit process."					



1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

#### Section XI - Networking in the Environmental Center

1. The presentation was clear and easy to understand	0	0	1	10	5
2. The presentation was organized and logical	0	0	1	9	6
3. I understand how the Environmental Center accomplishes its tasks	0	0	0	9	7
4. I can apply the Environmental Center functions to my office	0	0	2	8	6
5. Comments: How can this Section be improved?					
"PNRS need to bring all GAS agencies together more often."					
"Should have this workshop earlier during the day."					
"Strongly recommend that all head of department meet monthly."					
"All agencies should work together without any bias decision making."					

#### Section XII - Building Your Own Network

1. I understand the idea of networking	0	0	0	9	7
2. I can apply this idea in my own office	0	0	0	12	4
3. The exercise for this Section was helpful in building a network	0	0	0	9	7
4. Comments: How could this Section have been improved?					
"Sometimes the director of the dept. signs permits without knowledge of key people."					
"Use communication as much as possible."					
"Comply the function of PNRS to improve the network."					
"It is good to attempt to build a local network."					

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

### Overall

1. I thought this workshop was well planned and prepared	0	0	0	8	7
2. I felt this information presented in the workshop will help me in my job	0	0	0	5	10
3. I think the ideas presented in the workshop will help improve island Environmental Management	0	0	0	3	12
4. I learned many new techniques in environmental management that I will apply in my work	0	0	0	9	6
5. I understand how networking will help me in my job	0	0	0	9	6
6. I think major projects on my island should be reviewed to determine their environmental impact	0	0	0	3	12

### Additional Comments

"As a participant from an agency that doesn't deal with environmental things directly, terminology used are very new to me. Therefore, I recommend that more time should be allocated for definitions."

"Agree that the EIAs should be considered as another requirement in the PNRS to help define the site plans more effectively for the PNRS committee and reviewal. Also being knowledge of how to review on EIA improves my reviewing techniques."

"Overall the workshop was the best so far. I really think that 4 hours a day is sufficient enough."

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Island: MAJURO

1      2      3      4      5

### Section I - Definitions

1. The Definitions were clear and easy to understand	0	0	0	1	4
2. The terms defined helped me understand the lectures	0	0	0	1	4
3. The workbook materials on Definitions were appropriate	0	0	0	0	5
4. Comments: What other words should have been defined?	none				

### Section II - Why Assess Impacts

1. The presentation was clear and easy to understand	0	0	0	1	4
2. The presentation was organized and logical	0	0	1	1	3
3. The reasons for Assessing Impact made sense	0	0	0	0	5
4. Comments: How might this presentation have been made better					
"Nothing better than what has been presented."					
"It was very impressive."					

### Section III - Slide Show

1. Introduction to slide show was good	0	0	0	2	3
2. Slide show discussed all the important projects & impacts	0	0	1	1	3
3. The presentation of the slide show was well done	0	0	0	0	5
4. Each of the topics discussed in the slide show were discussed adequately	0	0	0	2	3
5. The slide show discussed topics relevant to my island	0	0	0	3	2
6. Slide show was well organized	0	0	0	2	3
7. Comments: How could the slide show be improved?					
"Include various scenes where adverse impacts from consturction are shown due to mitigative measures."					
"Can we try TV in future workshops?"					

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section IV - What EIA Should Do

1. Presentation was clear and easy to understand	0	0	0	1	4
2. Presentation was organized and logical	0	0	0	0	5
3. I have a better understanding of what information should be gathered during the EIA process	0	0	0	1	4
4. Comments: How could this Section have been improved? "More exercises."					

#### Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand	0	0	0	1	4
2. The presentation was organized and logical	0	0	0	3	2
3. I understand how checklist are used	0	0	0	2	3
4. I understand how materials are used	0	0	1	3	1
5. I understand how sequence diagrams are used	0	0	1	3	1
6. Comments: How could this Section have been improved? "Need to have at least a couple more exercises on how materials are used and the sequence diagrams."					

#### Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	0	0	1	4
2. The presentation was organized and logical	0	0	0	1	4
3. I am aware and could identify approach to mitigative measures	0	0	0	1	4
4. Comments: How could the Section have been improved? "It was well done."					

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	0	0	1	2
2. The background materials covered the project well	0	0	0	2	1
3. The presentation of the description of the project was organized and logical	0	0	0	1	2
*4. The tank farm was appropriate site for the activity	0	0	2	0	1
5. Working in a group helped me identify impacts and mitigative measure	0	0	0	1	2
6. I enjoyed working in a group for this activity	0	0	0	1	2
7. The group presentations were useful	0	0	0	0	2

8. Comments: How could this section have been improved?

"Working in groups can really make a difference in one's opinion. It was great."

"Allow a little more time to evaluate the site review."

\* There was confusion in the responses to this question due to an error in the site name on the evaluation form.

Section X - Local Environmental Laws

1. The presentation was clear and easy to understand	0	0	0	2	1
2. The presentation was organized and logical	0	0	0	1	2
3. I now have a good understanding of the Environmental Laws of my island	0	0	0	3	0

4. Comments: How could this section have been improved

"Police department should have been invited to the lecture."

"Explaining two different laws at one time is confusing. The laws themselves are confusing. More detail is needed."

"Visual presentation."

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section XI - Networking in the Environmental Center

1. The presentation was clear and easy to understand	0	0	1	0	2
2. The presentation was organized and logical	0	0	1	0	2
3. I understand how the Environmental Center accomplishes its tasks	0	0	0	1	2
4. I can apply the Environmental Center functions to my office	0	0	0	1	2
5. Comments: How can this Section be improved?	none				

#### Section XII - Building Your Own Network

1. I understand the idea of networking	0	0	0	2	2
2. I can apply this idea in my own office	0	0	0	1	3
3. The exercise for this Section was helpful in building a network	0	0	0	1	3
4. Comments: How could this Section have been improved?	none				

#### Overall

1. I thought this workshop was well planned and prepared	0	0	0	0	4
2. I felt this information presented in the workshop will help me in my job	0	0	0	1	3
3. I think the ideas presented in the workshop will help improve island Environmental Management	0	0	0	0	4
4. I learned many new techniques in environmental management that I will apply in my work	0	0	0	1	3
5. I understand how networking will help me in my job	0	0	0	1	3
6. I think major projects on my island should be reviewed to determine their environmental impact	0	0	0	0	4

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Island: TRUK

1    2    3    4    5

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### Section I - Definitions

- |   |   |   |   |    |   |
|---|---|---|---|----|---|
| 1. The Definitions were clear and easy to understand      | 0 | 1 | 0 | 9  | 5 |
| 2. The terms defined helped me understand the lectures    | 0 | 1 | 0 | 10 | 4 |
| 3. The workbook materials on Definitions were appropriate | 1 | 0 | 0 | 6  | 8 |
| 4. Comments: What other words should have been defined?   |   |   |   |    |   |
| "Every word that was used was very well defined."         |   |   |   |    |   |

### Section II - Why Assess Impacts

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. The presentation was clear and easy to understand           | 1 | 0 | 1 | 5 | 8 |
| 2. The presentation was organized and logical                  | 0 | 1 | 0 | 7 | 7 |
| 3. The reasons for Assessing Impact made sense                 | 1 | 1 | 1 | 4 | 8 |
| 4. Comments: How might this presentation have been made better |   |   |   |   |   |
| "Present more case studies and examples."                      |   |   |   |   |   |
| "Time was limited, but I believe I learned a great deal."      |   |   |   |   |   |
| "Should go into more details."                                 |   |   |   |   |   |

### Section III - Slide Show

- |   |   |   |   |    |   |
|---|---|---|---|----|---|
| 1. Introduction to slide show was good                                      | 0 | 1 | 1 | 8  | 5 |
| 2. Slide show discussed all the important projects & impacts                | 0 | 2 | 0 | 8  | 5 |
| 3. The presentation of the slide show was well done                         | 0 | 1 | 1 | 4  | 8 |
| 4. Each of the topics discussed in the slide show were discussed adequately | 0 | 1 | 2 | 10 | 2 |
| 5. The slide show discussed topics relevant to my island                    | 0 | 1 | 2 | 10 | 1 |
| 6. Slide show was well organized  | 0 | 1 | 1 | 7  | 6 |

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

7. Comments: How could the slide show be improved?

"Should be more geared to Truk islands."

"Have more slides instead of a few."

"Make the letterings more bigger."

"Slide show should be about topics familiar to the participants."

"Include more slides on local situations in the next session."

Section IV - What EIA Should Do

1. Presentation was clear and easy to understand 1 0 0 8 6

2. Presentation was organized and logical 0 1 0 7 7

3. I have a better understanding of what information  
 should be gathered during the EIA process 1 0 1 7 6

4. Comments: How could this Section have been improved?

"Should present better examples of real EIA and what it does."

"Should keep having people like Peter and Jackie teach us and spend more time with us."

"It was very interesting and made me improve."

"Prefer a two week workshop because three days is too short."

Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand 1 0 0 8 6

2. The presentation was organized and logical 1 0 0 7 6

3. I understand how checklist are used 1 0 1 7 6

4. I understand how materials are used 0 1 0 7 7

5. I understand how sequence diagrams are used 0 1 1 10 3

6. Comments: How could this Section have been improved?

"Should spend more time on each method."

"Help us learn more about the techniques."



- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	1	0	4	10
2. The presentation was organized and logical	0	1	0	5	9
3. I am aware and could identify approach to mitigative measures	0	1	0	8	6
4. Comments: How could the Section have been improved? "Should cover engineering mitigative measures." "Networking is an excellent idea."					

#### Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	1	2	6	5
2. The background materials covered the project well	0	1	3	7	3
3. The presentation of the description of the project was organized and logical	0	2	1	7	4
*4. The tank farm was appropriate site for the activity	0	1	5	5	3
5. Working in a group helped me identify impacts and mitigative measure	1	0	0	5	8
6. I enjoyed working in a group for this activity	1	0	0	5	8
7. The group presentations were useful	1	0	0	4	9
8. Comments: How could this section have been improved? "Should use a different site for site review and spend more time on preparation of presentation." "More time needed for this section." "Improve development of the island."					

\* There was confusion in the responses to this question due to an error in the site name on the evaluation form.

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section X - Local Environmental Laws

- |    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 1. | The presentation was clear and easy to understand   | 0 | 1 | 5 | 5 | 3 |
| 2. | The presentation was organized and logical  | 0 | 1 | 6 | 3 | 4 |
| 3. | I now have a good understanding of the Environmental Laws of my island  | 0 | 2 | 3 | 5 | 3 |
| 4. | Comments: How could this section have been improved   |   |   |   |   |   |
|    | "Should distribute copies of local environmental laws."   |   |   |   |   |   |
|    | "Invite someone from the Attorney General's Office."  |   |   |   |   |   |
|    | "Could have understood more by having the appropriate personnel from the Health Department give a review of the procedures and policies." |   |   |   |   |   |
|    | "The presentation was too general. The speaker should have been more into details."   |   |   |   |   |   |

#### Section XI - Networking in the Environmental Center

- |    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 1. | The presentation was clear and easy to understand                       | 1 | 0 | 1 | 7 | 5 |
| 2. | The presentation was organized and logical                              | 1 | 0 | 2 | 6 | 5 |
| 3. | I understand how the Environmental Center accomplishes its tasks        | 1 | 0 | 1 | 6 | 6 |
| 4. | I can apply the Environmental Center functions to my office             | 0 | 0 | 2 | 4 | 8 |
| 5. | Comments: How can this Section be improved?                             |   |   |   |   |   |
|    | "Spend more time on topic."   |   |   |   |   |   |
|    | "We have to work cooperatively with each other or with other agencies." |   |   |   |   |   |
|    | "Eliminate politicians."  |   |   |   |   |   |
|    | "Too elaborative."  |   |   |   |   |   |

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

---

Section XII - Building Your Own Network

1. I understand the idea of networking	1	0	0	8	3
2. I can apply this idea in my own office	0	1	0	6	5
3. The exercise for this Section was helpful in building a network	1	0	0	7	4
4. Comments: How could this Section have been improved? "Should show actual examples of work being done." "Some areas in the exercise were not applicable."					

Overall

1. I thought this workshop was well planned and prepared	1	0	0	5	6
2. I felt this information presented in the workshop will help me in my job	1	1	1	3	6
3. I think the ideas presented in the workshop will help improve island Environmental Management	1	0	0	2	9
4. I learned many new techniques in environmental management that I will apply in my work	0	1	0	5	6
5. I understand how networking will help me in my job	1	0	2	3	6
6. I think major projects on my island should be reviewed to determine their environmental impact	1	0	0	3	8

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Island: POHNPEI

1      2      3      4      5

### Section I - Definitions

- |   |   |   |   |   |    |
|---|---|---|---|---|----|
| 1. The Definitions were clear and easy to understand      | 0 | 0 | 1 | 2 | 13 |
| 2. The terms defined helped me understand the lectures    | 0 | 0 | 0 | 1 | 15 |
| 3. The workbook materials on Definitions were appropriate | 0 | 0 | 2 | 0 | 14 |
| 4. Comments: What other words should have been defined?   |   |   |   |   |    |

"The workbook materials on definitions were clear and easy to understand."

"This workshop was new and very helpful."

### Section II - Why Assess Impacts

- |  |   |   |   |   |    |
|--|---|---|---|---|----|
| 1. The presentation was clear and easy to understand           | 0 | 0 | 1 | 4 | 11 |
| 2. The presentation was organized and logical                  | 0 | 0 | 1 | 3 | 11 |
| 3. The reasons for Assessing Impact made sense                 | 0 | 0 | 0 | 1 | 15 |
| 4. Comments: How might this presentation have been made better |   |   |   |   |    |

"The presentation of this workshop on EIA was an excellent presentation."

"Assessing impact made sense. Presentation was clear and easy to understand."

"Should have more slides and group presentations."

"Help assist the other agencies needed for environmental assessment."

### Section III - Slide Show

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Introduction to slide show was good                                      | 0 | 0 | 3 | 6 | 7 |
| 2. Slide show discussed all the important projects & impacts                | 0 | 0 | 4 | 5 | 7 |
| 3. The presentation of the slide show was well done                         | 0 | 0 | 3 | 4 | 8 |
| 4. Each of the topics discussed in the slide show were discussed adequately | 0 | 1 | 4 | 5 | 6 |
| 5. The slide show discussed topics relevant to my island                    | 0 | 1 | 2 | 4 | 9 |
| 6. Slide show was well organized  | 0 | 0 | 2 | 5 | 7 |

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

7. Comments: How could the slide show be improved?

"Content of slide show was good but hard to see."

"Should discuss all the important projects and impacts. Each of the topics discussed in the slide show were discussed adequately."

"The slide show was hard to see."

"The slide show should also cover the area affected."

"More time should be allocated to discuss problems shown and share the opinion of the participants."

"Slides should include some Major on going projects in each FSM state."

Section IV - What EIA Should Do

1. Presentation was clear and easy to understand	0	0	2	2	12
2. Presentation was organized and logical	0	1	1	3	11
3. I have a better understanding of what information should be gathered during the EIA process	0	0	1	6	9

4. Comments: How could this Section have been improved?

"Have public education so people will understand the needs of EIA."

"Need better understanding of what information should be gathered during the EIA process."

"More public education."

"Apply EIA processing techniques to manage our island."

"Need more specific examples of what EIA should do."

Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand	0	0	2	6	8
2. The presentation was organized and logical	0	0	1	6	9
3. I understand how checklist are used	0	0	3	6	7
4. I understand how materials are used	0	0	7	3	6
5. I understand how sequence diagrams are used	0	0	3	7	6

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

6. Comments: How could this Section have been improved?

"Time was too short. Should take more time."

"More detailed explanation is needed."

"Need to understand what checklists are used for."

"More explanation and elaboration required on matrices."

"The evaluation aspect of the EIA should have more time. I feel that evaluation of the project is the most important aspect for success or failure of the project."

Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	0	1	1	14
2. The presentation was organized and logical	0	0	2	1	13
3. I am aware and could identify approach to mitigative measures	0	0	0	6	10
4. Comments: How could this section have been improved?					
"Presentation was clear and easy to understand."					
"Should identify more mitigative measures."					

Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	0	0	4	8
2. The background materials covered the project well	0	0	4	3	5
3. The presentation of the description of the project was organized and logical	0	1	6	1	5
*4. The tank farm was appropriate site for the activity	2	0	4	1	6
5. Working in a group helped me identify impacts and mitigative measure	0	0	1	0	12
6. I enjoyed working in a group for this activity	0	0	0	0	12
7. The group presentations were useful	0	0	0	1	10

\* There was confusion in the responses to this question due to an error in the site name on the evaluation form.

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

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8. Comments: How could this section have been improved?

"A little more time is needed especially in a group of 5-7 members."

"Review of the site could be improved if detailed plans are available."

"Need more time for presentations."

"Have an individual talk about his/her learnings from one course."

"Working in groups helped us identify impact and mitigative measures of this workshop. The group presentations were useful."

#### Section X - Local Environmental Laws

1. The presentation was clear and easy to understand	1	3	4	1	3
2. The presentation was organized and logical	1	3	5	0	3
3. I now have a good understanding of the Environmental Laws of my island	2	2	3	1	4

4. Comments: How could this section have been improved

"Should organize a good understanding of the Environmental Law Enforcement."

"Public education are all environmental laws."

"Not enough details or information on environmental laws with Mr. Hallen."

"Should be presented on a more prepared outlined lecture with detailed summary."

"The law is very general and does not reflect many important aspects of EIA. Each state should have laws itself."

"The environmental laws should be distributed to all participants."

"There should be more research done on the local law and systematically present it to include procedures and processes."

"Should ask Donna not to go somewhere else besides this very important workshop."

"The presentor was not able to complete his presentation."

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section XI - Networking in the Environmental Center

1. The presentation was clear and easy to understand	0	0	2	1	9
2. The presentation was organized and logical	0	0	1	2	9
3. I understand how the Environmental Center accomplishes its tasks	0	0	1	3	8
4. I can apply the Environmental Center functions to my office	0	0	0	5	6
5. Comments: How can this Section be improved?					
"Need more concrete examples on the kinds of letters sent out. Describe some problems or reviews that EPA people raise."					
"Talk to community people about EIA and how to improve them."					
"Should understand how the environmental center accomplishes it's tasks."					

#### Section XII - Building Your Own Network

1. I understand the idea of networking	0	0	2	1	11
2. I can apply this idea in my own office	0	0	1	2	11
3. The exercise for this Section was helpful in building a network	0	0	0	2	12
4. Comments: How could this Section have been improved?					
"It could be improved by coordination with FSM or state level personnel to get involved in the presentations."					
"Have more workshops on EIA."					
"This section was presented well."					
"Should help in building a network plus understanding the ideas of network on this island of Pohnpei state."					



- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

1      2      3      4      5

Overall

1. I thought this workshop was well planned and prepared	0	0	1	3	10
2. I felt this information presented in the workshop will help me in my job	0	0	1	1	12
3. I think the ideas presented in the workshop will help improve island Environmental Management	0	0	1	1	12
4. I learned many new techniques in environmental management that I will apply in my work	0	0	0	3	11
5. I understand how networking will help me in my job	0	0	1	0	13
6. I think major projects on my island should be reviewed to determine their environmental impact	0	0	0	1	13

Special Comments:

"Although I am not directly involve in the reviewing process, I feel like I'm now able to conduct an EIA for any major project. At the same time assist the development makers with how much impacts can be detected in the environment. I'm now capable of disseminating how important the environment is and the consequences of environmental development for the state.

I thank you for this opportunity."

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Island: PALAU

1      2      3      4      5

### Section I - Definitions

1. The Definitions were clear and easy to understand	0	0	0	15	10
2. The terms defined helped me understand the lectures	0	0	0	12	13
3. The workbook materials on Definitions were appropriate	0	0	3	9	13
4. Comments: What other words should have been defined?					
"Mitigative change into control measures."					
"Public Health Impact."					
"Laws should have been simplified."					
"Words like Tsunami should be explained."					
"Presentation filled with difficult vocabulary."					

### Section II - Why Assess Impacts

1. The presentation was clear and easy to understand	0	0	3	13	9
2. The presentation was organized and logical	0	0	2	10	13
3. The reasons for Assessing Impact made sense	0	0	0	6	19
4. Comments: How might this presentation have been made better					
"Need more time and more examples."					
"More slides would be helpful."					
"Presentation was too quick. Difficulty in understanding all the regulations and the process involved."					
"Need more work exercises."					
"Extend it for another week."					

### Section III - Slide Show

1. Introduction to slide show was good	0	0	0	15	9
2. Slide show discussed all the important projects & impacts	0	1	2	15	6
3. The presentation of the slide show was well done	0	0	4	10	10

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

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4. Each of the topics discussed in the slide show were discussed adequately	0	1	2	13	8
5. The slide show discussed topics relevant to my island	0	0	4	10	9
6. Slide show was well organized	0	0	2	12	8
7. Comments: How could the slide show be improved?					
"Need more discussion on what was happening in certain pictures."					
"More information regarding Micronesia."					
"More information on the existing project problem in Palau."					
"It could have been improved by using a television camera."					
"Should have more slides on Palau. Instructors should have more experience in Palau Problems."					

#### Section IV - What EIA Should Do

1. Presentation was clear and easy to understand	0	0	0	13	11
2. Presentation was organized and logical	0	0	1	14	9
3. I have a better understanding of what information should be gathered during the EIA process	0	0	2	11	11
4. Comments: How could this Section have been improved?					
"Need more practice and workshops."					
"Need local Examples."					
"Include public health concern."					
"Use simple English."					

#### Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand	0	0	0	14	14
2. The presentation was organized and logical	0	0	0	14	9

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

---

3. I understand how checklist are used	0	0	1	11	11
4. I understand how materials are used	0	0	2	15	5
5. I understand how sequence diagrams are used	0	0	5	11	6
6. Comments: How could this Section have been improved?					
"Should slow down."					
"Perhaps a local checklist could be developed."					
"Do some exercises and check."					
"Lecture was rushed. Should allow more time for this session."					

Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	0	0	12	11
2. The presentation was organized and logical	0	0	0	10	13
3. I am aware and could identify approach to mitigative measures	0	0	0	10	12
4. Comments: How could the Section have been improved?					
"Need to slow down."					
"I strongly recommend that mutual understanding is well taken among concerned in order to avoid future conflicts and interference to one's objective."					
"More on control measures."					
"This area was presented very clearly."					

Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	0	0	6	14
2. The background materials covered the project well	0	0	0	9	11
3. The presentation of the description of the project was organized and logical	0	0	1	8	10

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

	1	2	3	4	5
*4. The tank farm was appropriate site for the activity	2	2	0	6	9
5. Working in a group helped me identify impacts and mitigative measure	0	0	0	9	11
6. I enjoyed working in a group for this activity	0	0	0	7	13
7. The group presentations were useful	0	0	0	6	13
8. Comments: How could this section have been improved? "Need more time working on the report presentation." "For the next workshop, each group should be assigned to different kinds of projects. That way we'll know that each group really knows what they are doing."					
* There was confusion in the responses to this question due to an error in the site name on the evaluation form.					

#### Section X - Local Environmental Laws

1. The presentation was clear and easy to understand	0	0	2	12	6
2. The presentation was organized and logical	0	0	0	12	7
3. I now have a good understanding of the Environmental Laws of my island	0	0	1	13	6
4. Comments: How could this section have been improved "Voice was too soft. Speakers were speaking to the other side of the room most of the time." "Need to work with the office of EQPB." "Need more time to properly cover the subject and explain it."					

#### Section XI - Networking in the Environmental Center

1. The presentation was clear and easy to understand	0	0	0	7	13
2. The presentation was organized and logical	0	0	0	8	12

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

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3. I understand how the Environmental Center accomplishes its tasks	0	0	0	8	11
4. I can apply the Environmental Center functions to my office	0	0	1	7	12
5. Comments: How can this Section be improved? "Need help from the outside."					

#### Section XII - Building Your Own Network

1. I understand the idea of networking	0	0	0	8	9
2. I can apply this idea in my own office	0	0	1	10	6
3. The exercise for this Section was helpful in building a network	0	0	0	5	12
4. Comments: How could this Section have been improved?	none				

#### Overall

1. I thought this workshop was well planned and prepared	0	0	0	2	15
2. I felt this information presented in the workshop will help me in my job	0	0	0	6	11
3. I think the ideas presented in the workshop will help improve island Environmental Management	0	0	0	4	13
4. I learned many new techniques in environmental management that I will apply in my work	0	0	0	6	11
5. I understand how networking will help me in my job	0	0	0	5	11
6. I think major projects on my island should be reviewed to determine their environmental impact	0	0	0	0	16

Other comments:

"I appreciate your efforts in helping us understand the importance of managing our environment for our own good and for future generations of Palauans. You have helped cleared some of the negative notions I and others have with regard to the work of the EQPB/Palau office. I now appreciate the depth and magnitude of these concerns and will do my best to assist in whatever ways I can with our state government projects to comply with EQPB regulations. Thank you for a very enlightening three days."

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Island: SAIPAN

1      2      3      4      5

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### Section I - Definitions

- |   |   |   |   |   |    |
|---|---|---|---|---|----|
| 1. The Definitions were clear and easy to understand      | 0 | 0 | 0 | 7 | 10 |
| 2. The terms defined helped me understand the lectures    | 0 | 0 | 1 | 8 | 8  |
| 3. The workbook materials on Definitions were appropriate | 0 | 0 | 0 | 6 | 11 |
| 4. Comments: What other words should have been defined?   |   |   |   |   |    |
| "This was definitely a valuable part of the workshop."    |   |   |   |   |    |

### Section II - Why Assess Impacts

- |   |   |   |   |   |    |
|---|---|---|---|---|----|
| 1. The presentation was clear and easy to understand                                      | 0 | 0 | 0 | 7 | 10 |
| 2. The presentation was organized and logical   | 0 | 0 | 0 | 6 | 10 |
| 3. The reasons for Assessing Impact made sense  | 0 | 0 | 0 | 6 | 11 |
| 4. Comments: How might this presentation have been made better                            |   |   |   |   |    |
| "This section made me aware of critical situations concerning environments."              |   |   |   |   |    |
| "Could have been more concise and less repetitive."                                       |   |   |   |   |    |
| "Higher level tailored more specifically to audience (education) and the CNMI situation." |   |   |   |   |    |
| "A little less redundancy in oral presentations."   |   |   |   |   |    |

### Section III - Slide Show

- |   |   |   |   |    |   |
|---|---|---|---|----|---|
| 1. Introduction to slide show was good                                      | 0 | 0 | 1 | 10 | 4 |
| 2. Slide show discussed all the important projects & impacts                | 0 | 1 | 5 | 4  | 5 |
| 3. The presentation of the slide show was well done                         | 0 | 0 | 1 | 10 | 3 |
| 4. Each of the topics discussed in the slide show were discussed adequately | 0 | 1 | 0 | 8  | 5 |
| 5. The slide show discussed topics relevant to my island                    | 0 | 0 | 1 | 8  | 6 |
| 6. Slide show was well organized  | 0 | 0 | 1 | 7  | 6 |



1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

7. Comments: How could the slide show be improved?

"Hire professional photographers who compose and frame subjects that are crucial to get the story across to the viewers."

"Overhead transparencies could be better prepared for easy reading."

"Try to include a slide of a storm drainage and what's coming out of it."

Section IV - What EIA Should Do

1. Presentation was clear and easy to understand	0	0	0	7	10
2. Presentation was organized and logical	0	0	0	7	10
3. I have a better understanding of what information should be gathered during the EIA process	0	0	0	6	11
4. Comments: How could this Section have been improved?					
"Add case studies. Go over materials not covered in lecture."					
"More concise, less repetitive."					

Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand	0	0	2	7	8
2. The presentation was organized and logical	0	0	1	6	10
3. I understand how checklist are used	0	0	1	5	11
4. I understand how matrices are used	0	0	1	8	8
5. I understand how sequence diagrams are used	0	0	3	8	6
6. Comments: How could this Section have been improved?					
"More time should be devoted to methods of Environmental Analysis. This portion was not touched on."					
"A little more time for questions and answers. Use examples likely to occur."					

Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	0	1	6	10
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1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

2. The presentation was organized and logical	0	0	1	5	11
3. I am aware and could identify approach to mitigative measures	0	0	1	7	9
4. Comments: How could the Section have been improved?					
"A discussion of mitigative measures in different areas and their benefits would help appreciate the need and importance of these measures."					
"More local examples."					
"Review project in the text."					
"Give more examples of mitigative measures in well developed places like Hawaii."					

#### Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	0	0	8	8
2. The background materials covered the project well	0	1	4	5	7
3. The presentation of the description of the project was organized and logical	0	0	3	8	6
*4. The tank farm was appropriate site for the activity	0	0	2	5	10
5. Working in a group helped me identify impacts and mitigative measure	0	0	2	4	10
6. I enjoyed working in a group for this activity	0	0	2	4	11
7. The group presentations were useful	0	0	0	4	9
8. Comments: How could this section have been improved?					
"Presence of a representative from Nansay during the group presentations would be beneficial. Since reports are not bias, Nansay will get first hand information on how CNMI feel about its development."					
"Copies of the Nansay report could have been helpful."					
"More detail on project, perhaps one extra day to evaluate group findings."					
"Conduct a site review discussion in a shady area away from heat."					

\* There was confusion in the responses to this question due to an error in the site name on the evaluation form.

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

#### Section X - Local Environmental Laws

- |  |   |   |   |    |   |
|--|---|---|---|----|---|
| 1. The presentation was clear and easy to understand   | 0 | 0 | 3 | 11 | 4 |
| 2. The presentation was organized and logical  | 0 | 0 | 4 | 11 | 3 |
| 3. I now have a good understanding of the Environmental Laws<br>of my island   | 0 | 0 | 1 | 12 | 5 |
| 4. Comments: How could this section have been improved   |   |   |   |    |   |
| "Evaluate this section on an individual presentation."   |   |   |   |    |   |
| "Could be significantly expanded."   |   |   |   |    |   |
| "More time should be devoted to identifying which environmental agency has<br>jurisdiction on various types of development."   |   |   |   |    |   |
| "Speakers should have been better informed about the topics that were to address<br>'local laws.' However, the talks and discussion were useful. More time should be<br>allowed for it." |   |   |   |    |   |
| "Additional time allocated."   |   |   |   |    |   |
| "Should have more handouts."   |   |   |   |    |   |

#### Section XI - Networking in the Environmental Center

- |   |   |   |   |    |   |
|---|---|---|---|----|---|
| 1. The presentation was clear and easy to understand  | 0 | 0 | 1 | 10 | 6 |
| 2. The presentation was organized and logical   | 0 | 0 | 1 | 10 | 6 |
| 3. I understand how the Environmental Center accomplishes<br>its tasks  | 0 | 0 | 1 | 11 | 5 |
| 4. I can apply the Environmental Center functions to my office  | 0 | 1 | 5 | 4  | 7 |
| 5. Comments: How can this Section be improved?  |   |   |   |    |   |
| "Need additional information on the EIA's Environmental Center reviews."  |   |   |   |    |   |
| "The context in which the Environmental Center (EC) reviews EIA, permits, etc. was<br>not too clear. Better explanation of EC's role in that review may have been<br>better." |   |   |   |    |   |
| "Directors should be present, especially those who are involved in Environmental<br>Planning or decision making."   |   |   |   |    |   |

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section XII - Building Your Own Network

- |  |   |   |   |    |   |
|--|---|---|---|----|---|
| 1. I understand the idea of networking   | 0 | 0 | 0 | 11 | 7 |
| 2. I can apply this idea in my own office  | 0 | 0 | 4 | 7  | 7 |
| 3. The exercise for this Section was helpful in building a network   | 0 | 0 | 2 | 8  | 8 |
| 4. Comments: How could this Section have been improved?  |   |   |   |    |   |
| "Could have spent more time on it. Audience feedback after listing names could be a good source of information for the group." |   |   |   |    |   |

#### Overall

- |   |   |   |   |   |    |
|---|---|---|---|---|----|
| 1. I thought this workshop was well planned and prepared  | 0 | 0 | 0 | 6 | 12 |
| 2. I felt this information presented in the workshop will help me in my job                       | 0 | 0 | 1 | 6 | 11 |
| 3. I think the ideas presented in the workshop will help improve island Environmental Management  | 0 | 0 | 0 | 7 | 11 |
| 4. I learned many new techniques in environmental management that I will apply in my work         | 0 | 0 | 4 | 5 | 9  |
| 5. I understand how networking will help me in my job   | 0 | 0 | 1 | 9 | 8  |
| 6. I think major projects on my island should be reviewed to determine their environmental impact | 0 | 0 | 0 | 1 | 17 |

#### Additional comments:

"Thank you for the shared information and thank you for giving me the opportunity, especially to D.E.Q. who coordinated this worthwhile event."

"The lectures could be shorter and maybe more interactive to insure understanding, rather than just beating an idea to death. (Period for questions, ask participants for examples, ideas, etc.)"

## EVALUATION - COMPILED RESULTS

- 1 - Strongly Disagree  
2 - Disagree  
3 - Neutral  
4 - Agree  
5 - Strongly Agree

Island: GUAM

1      2      3      4      5

### Section I - Definitions

1. The Definitions were clear and easy to understand	0	1	1	16	5
2. The terms defined helped me understand the lectures	0	1	2	16	4
3. The workbook materials on Definitions were appropriate	0	1	0	16	8
4. Comments: What other words should have been defined?					
"Data recovery process in reference to archaeological recovery."					
"Mitigations."					
"Environmental Protection Plan."					

### Section II - Why Assess Impacts

1. The presentation was clear and easy to understand	0	0	0	13	9
2. The presentation was organized and logical	0	0	0	10	12
3. The reasons for Assessing Impact made sense	0	0	0	13	9
4. Comments: How might this presentation have been made better					
"Giving examples (visual, models, etc.) of projects that had an ill effect on the area and surrounding areas."					

### Section III - Slide Show

1. Introduction to slide show was good	0	0	1	13	8
2. Slide show discussed all the important projects & impacts	0	0	3	15	4
3. The presentation of the slide show was well done	0	0	2	10	10
4. Each of the topics discussed in the slide show were discussed adequately	0	0	6	11	5
5. The slide show discussed topics relevant to my island	0	0	2	16	4
6. Slide show was well organized	0	0	1	14	7

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

7. Comments: How could the slide show be improved?

"Include topics on golf courses and endangered species."

"Include more names of the islands depicted in the slide show."

"Make the title slides so that they are consistant."

"Magellan did not discover the pacific, people were already residing there. It's like saying Marco Polo discovered China."

"Slides of local projects would be useful."

#### Section IV - What EIA Should Do

1. Presentation was clear and easy to understand	0	0	1	13	9
2. Presentation was organized and logical	0	0	1	13	9
3. I have a better understanding of what information should be gathered during the EIA process	0	0	2	9	12
4. Comments: How could this Section have been improved?					
"Presentation was slanted too much toward approval of projects. Not enough emphasis critical review."					
"Should cover how agencies get involved in the EIA."					

#### Section V - Techniques for EIA Evaluation

1. The presentation was clear and easy to understand	0	0	1	13	8
2. The presentation was organized and logical	0	0	1	13	8
3. I understand how checklist are used	0	0	2	16	4
4. I understand how matrices are used	0	0	3	15	4
5. I understand how sequence diagrams are used	0	0	3	15	4
6. Comments: How could this Section have been improved?					
"Actual practice with the checklists and matrices would be great."					

- 1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1 2 3 4 5

#### Section VI - Mitigative Measures

1. The presentation was clear and easy to understand	0	0	1	15	7
2. The presentation was organized and logical	0	0	2	14	7
3. I am aware and could identify approach to mitigative measures	0	0	3	12	9
4. Comments: How could the Section have been improved? "Slides of different mitigation. Also effectiveness and limitations of different methods."					

#### Sections VII, VIII, IX - Site Review

1. The objective of the site review was clearly spelled out	0	0	0	16	8
2. The background materials covered the project well	1	1	1	17	4
3. The presentation of the description of the project was organized and logical	0	0	2	17	5
*4. The tank farm was appropriate site for the activity	0	0	1	12	10
5. Working in a group helped me identify impacts and mitigative measure	0	0	1	11	12
6. I enjoyed working in a group for this activity	0	0	0	13	11
7. The group presentations were useful	0	0	0	12	12
8. Comments: How could this section have been improved? "Having more background information provided by the developer." "Baseline data was not fully provided."					

\* There was confusion in the responses to this question due to an error in the site name on the evaluation form.

#### Section X - Local Environmental Laws

1. The presentation was clear and easy to understand	0	0	3	12	8
2. The presentation was organized and logical	0	0	3	11	9

1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

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3. I now have a good understanding of the Environmental Laws of my island	0	0	8	10	5
4. Comments: How could this section have been improved					
"Invite good speakers from the local community."					
"Need more time."					

Section XI - Networking in the Environmental Center

1. The presentation was clear and easy to understand	0	0	2	15	7
2. The presentation was organized and logical	0	0	1	13	10
3. I understand how the Environmental Center accomplishes its tasks	0	0	1	15	8
4. I can apply the Environmental Center functions to my office	0	0	3	14	5
5. Comments: How can this Section be improved?					
"Legal structure in Hawaii is different. It may not work as well here."					

Section XII - Building Your Own Network

1. I understand the idea of networking	0	0	0	10	9
2. I can apply this idea in my own office	0	0	0	9	9
3. The exercise for this Section was helpful in building a network	0	0	0	9	10
4. Comments: How could this Section have been improved?					
none					

Overall

1. I thought this workshop was well planned and prepared	0	0	0	7	12
--	---	---	---	---	----



1 - Strongly Disagree  
 2 - Disagree  
 3 - Neutral  
 4 - Agree  
 5 - Strongly Agree

1      2      3      4      5

---

2. I felt this information presented in the workshop will help me in my job	0	0	1	7	11
3. I think the ideas presented in the workshop will help improve island Environmental Management	0	0	0	6	13
4. I learned many new techniques in environmental management that I will apply in my work	0	0	4	7	8
5. I understand how networking will help me in my job	0	0	0	8	11
6. I think major projects on my island should be reviewed to determine their environmental impact	0	0	0	2	17

Additional comment:

"Other agencies/offices should have been invited like government's office, public health, GEDA, SBA, legislature or the Senator involved in land development committees. The workshop was definitely educational."